[MS-ADA1]:

Active Directory Schema Attributes A-L

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Revision Summary

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Table of Contents

1 Introduction 11
1.1 References 11

2 Attributes 13
2.1 Attribute accountExpires 13
2.2 Attribute accountNameHistory 13
2.3 Attribute aCSAggregateTokenRatePerUser 14
2.4 Attribute aCSAllocableRSVPBandwidth 14
2.5 Attribute aCSCacheTimeout 14
2.6 Attribute aCSDirection 15
2.7 Attribute aCSDSBMDeadTime 15
2.8 Attribute aCSDSBMPriority 15
2.9 Attribute aCSDSBMRefresh 16
2.10 Attribute aCSEnableACSService 16
2.11 Attribute aCSEnableRSVPAccounting 16
2.12 Attribute aCSEnableRSVPMessageLogging 17
2.13 Attribute aCSEventLogLevel 17
2.14 Attribute aCSIdentityName 17
2.15 Attribute aCSMaxAggregatePeakRatePerUser 18
2.16 Attribute aCSMaxDurationPerFlow 18
2.17 Attribute aCSMaximumSDUSize 18
2.18 Attribute aCSMaxNoOfAccountFiles 19
2.19 Attribute aCSMaxNoOfLogFiles 19
2.20 Attribute aCSMaxPeakBandwidth 19
2.21 Attribute aCSMaxPeakBandwidthPerFlow 20
2.22 Attribute aCSMaxSizeOfRSVPAccountFile 20
2.23 Attribute aCSMaxSizeOfRSVPLogFile 21
2.24 Attribute aCSMaxTokenBucketPerFlow 21
2.25 Attribute aCSMaxTokenRatePerFlow 21
2.26 Attribute aCSMinimumDelayVariation 22
2.27 Attribute aCSMinimumLatency 22
2.28 Attribute aCSMinimumPolicedSize 22
2.29 Attribute aCSNonReservedMaxSDUSize 23
2.30 Attribute aCSNonReservedMinPolicedSize 23
2.31 Attribute aCSNonReservedPeakRate 23
2.32 Attribute aCSNonReservedTokenSize 24
2.33 Attribute aCSNonReservedTxLimit 24
2.34 Attribute aCSNonReservedTxSize 24
2.35 Attribute aCSPermissionBits 25
2.36 Attribute aCSPolicyName 25
2.37 Attribute aCSPriority 25
2.38 Attribute aCSRSVPAccountFilesLocation 26
2.39 Attribute aCSRSVPLogFilesLocation 26
2.40 Attribute aCSServerList 27
2.41 Attribute aCSServiceType 27
2.42 Attribute aCSTimeOfDay 27
2.43 Attribute aCSTotalNoOfFlows 28
2.44 Attribute additionalTrustedServiceNames 28
2.45 Attribute addressBookRoots 28
2.46 Attribute addressBookRoots2 29
2.47 Attribute addressEntryDisplayTable 29
2.48 Attribute addressEntryDisplayTableMSDOS 30
2.49 Attribute addressSyntax 30
2.50 Attribute addressType 30
2.51 Attribute adminContextMenu 31

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2.52 Attribute adminCount 31
2.53 Attribute adminDescription 32
2.54 Attribute adminDisplayName 32
2.55 Attribute adminMultiselectPropertyPages 33
2.56 Attribute adminPropertyPages 33
2.57 Attribute allowedAttributes 33
2.58 Attribute allowedAttributesEffective 34
2.59 Attribute allowedChildClasses 34
2.60 Attribute allowedChildClassesEffective 34
2.61 Attribute altSecurityIdentities 35
2.62 Attribute aNR 35
2.63 Attribute applicationName 36
2.64 Attribute appliesTo 36
2.65 Attribute appSchemaVersion 36
2.66 Attribute assetNumber 37
2.67 Attribute assistant 37
2.68 Attribute associatedDomain 38
2.69 Attribute associatedName 38
2.70 Attribute assocNTAccount 38
2.71 Attribute attributeCertificateAttribute 39
2.72 Attribute attributeDisplayNames 39
2.73 Attribute attributeID 39
2.74 Attribute attributeSecurityGUID 40
2.75 Attribute attributeSyntax 40
2.76 Attribute attributeTypes 40
2.77 Attribute audio 41
2.78 Attribute auditingPolicy 41
2.79 Attribute authenticationOptions 42
2.80 Attribute authorityRevocationList 42
2.81 Attribute auxiliaryClass 42
2.82 Attribute badPasswordTime 43
2.83 Attribute badPwdCount 43
2.84 Attribute birthLocation 44
2.85 Attribute bootFile 44
2.86 Attribute bootParameter 44
2.87 Attribute bridgeheadServerListBL 45
2.88 Attribute bridgeheadTransportList 45
2.89 Attribute buildingName 45
2.90 Attribute builtinCreationTime 46
2.91 Attribute builtinModifiedCount 46
2.92 Attribute businessCategory 46
2.93 Attribute bytesPerMinute 47
2.94 Attribute c 47
2.95 Attribute cACertificate 48
2.96 Attribute cACertificateDN 48
2.97 Attribute cAConnect 48
2.98 Attribute canonicalName 49
2.99 Attribute canUpgradeScript 49
2.100 Attribute carLicense 49
2.101 Attribute catalogs 50
2.102 Attribute categories 50
2.103 Attribute categoryId 50
2.104 Attribute cAUsages 51
2.105 Attribute cAWEBURL 51
2.106 Attribute certificateAuthorityObject 52
2.107 Attribute certificateRevocationList 52
2.108 Attribute certificateTemplates 52
2.109 Attribute classDisplayName 53

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2.110 Attribute cn 53
2.111 Attribute co 53
2.112 Attribute codePage 54
2.113 Attribute cOMClassID 54
2.114 Attribute cOMCLSID 55
2.115 Attribute cOMInterfaceID 55
2.116 Attribute comment 55
2.117 Attribute cOMOtherProgId 56
2.118 Attribute company 56
2.119 Attribute cOMProgID 57
2.120 Attribute cOMTreatAsClassId 57
2.121 Attribute cOMTypelibId 57
2.122 Attribute cOMUniqueLIBID 58
2.123 Attribute contentIndexingAllowed 58
2.124 Attribute contextMenu 58
2.125 Attribute controlAccessRights 59
2.126 Attribute cost 59
2.127 Attribute countryCode 59
2.128 Attribute createDialog 60
2.129 Attribute createTimeStamp 60
2.130 Attribute createWizardExt 61
2.131 Attribute creationTime 61
2.132 Attribute creationWizard 61
2.133 Attribute creator 62
2.134 Attribute cRLObject 62
2.135 Attribute cRLPartitionedRevocationList 62
2.136 Attribute crossCertificatePair 63
2.137 Attribute currentLocation 63
2.138 Attribute currentParentCA 63
2.139 Attribute currentValue 64
2.140 Attribute currMachineId 64
2.141 Attribute dBCSPwd 64
2.142 Attribute dc 65
2.143 Attribute defaultClassStore 65
2.144 Attribute defaultGroup 66
2.145 Attribute defaultHidingValue 66
2.146 Attribute defaultLocalPolicyObject 66
2.147 Attribute defaultObjectCategory 67
2.148 Attribute defaultPriority 67
2.149 Attribute defaultSecurityDescriptor 68
2.150 Attribute deltaRevocationList 68
2.151 Attribute department 68
2.152 Attribute departmentNumber 69
2.153 Attribute description 69
2.154 Attribute desktopProfile 69
2.155 Attribute destinationIndicator 70
2.156 Attribute dhcpClasses 70
2.157 Attribute dhcpFlags 70
2.158 Attribute dhcpIdentification 71
2.159 Attribute dhcpMask 71
2.160 Attribute dhcpMaxKey 71
2.161 Attribute dhcpObjDescription 72
2.162 Attribute dhcpObjName 72
2.163 Attribute dhcpOptions 72
2.164 Attribute dhcpProperties 72
2.165 Attribute dhcpRanges 73
2.166 Attribute dhcpReservations 73
2.167 Attribute dhcpServers 73

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2.168 Attribute dhcpSites 74
2.169 Attribute dhcpState 74
2.170 Attribute dhcpSubnets 74
2.171 Attribute dhcpType 75
2.172 Attribute dhcpUniqueKey 75
2.173 Attribute dhcpUpdateTime 75
2.174 Attribute directReports 76
2.175 Attribute displayName 76
2.176 Attribute displayNamePrintable 76
2.177 Attribute distinguishedName 77
2.178 Attribute dITContentRules 77
2.179 Attribute division 78
2.180 Attribute dMDLocation 78
2.181 Attribute dmdName 79
2.182 Attribute dNReferenceUpdate 79
2.183 Attribute dnsAllowDynamic 79
2.184 Attribute dnsAllowXFR 80
2.185 Attribute dNSHostName 80
2.186 Attribute dnsNotifySecondaries 80
2.187 Attribute dNSProperty 81
2.188 Attribute dnsRecord 81
2.189 Attribute dnsRoot 81
2.190 Attribute dnsSecureSecondaries 82
2.191 Attribute dNSTombstoned 82
2.192 Attribute documentAuthor 83
2.193 Attribute documentIdentifier 83
2.194 Attribute documentLocation 83
2.195 Attribute documentPublisher 83
2.196 Attribute documentTitle 84
2.197 Attribute documentVersion 84
2.198 Attribute domainCAs 84
2.199 Attribute domainCrossRef 85
2.200 Attribute domainID 85
2.201 Attribute domainIdentifier 86
2.202 Attribute domainPolicyObject 86
2.203 Attribute domainPolicyReference 86
2.204 Attribute domainReplica 87
2.205 Attribute domainWidePolicy 87
2.206 Attribute drink 87
2.207 Attribute driverName 88
2.208 Attribute driverVersion 88
2.209 Attribute dSASignature 88
2.210 Attribute dSCorePropagationData 89
2.211 Attribute dSHeuristics 89
2.212 Attribute dSUIAdminMaximum 90
2.213 Attribute dSUIAdminNotification 90
2.214 Attribute dSUIShellMaximum 90
2.215 Attribute dynamicLDAPServer 91
2.216 Attribute eFSPolicy 91
2.217 Attribute employeeID 91
2.218 Attribute employeeNumber 92
2.219 Attribute employeeType 92
2.220 Attribute Enabled 93
2.221 Attribute enabledConnection 93
2.222 Attribute enrollmentProviders 93
2.223 Attribute entryTTL 94
2.224 Attribute extendedAttributeInfo 94
2.225 Attribute extendedCharsAllowed 95

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2.226 Attribute extendedClassInfo 95
2.227 Attribute extensionName..... 95
2.228 Attribute extraColumns..... 96
2.229 Attribute facsimileTelephoneNumber 96
2.230 Attribute fileExtPriority..... 97
2.231 Attribute flags..... 97
2.232 Attribute flatName..... 97
2.233 Attribute forceLogoff..... 98
2.234 Attribute foreignIdentifier..... 98
2.235 Attribute friendlyNames 98
2.236 Attribute fromEntry 99
2.237 Attribute fromServer 99
2.238 Attribute frsComputerReference.....100
2.239 Attribute frsComputerReferenceBL 100
2.240 Attribute fRSControlDataCreation.....100
2.241 Attribute fRSControlInboundBacklog.....101
2.242 Attribute fRSControlOutboundBacklog.....101
2.243 Attribute fRSDirectoryFilter 101
2.244 Attribute fRSDSPoll 102
2.245 Attribute fRSExtensions 102
2.246 Attribute fRSFaultCondition 103
2.247 Attribute fRSFileFilter.....103
2.248 Attribute fRSFlags 103
2.249 Attribute fRSLevelLimit 104
2.250 Attribute fRSMemberReference 104
2.251 Attribute fRSMemberReferenceBL.....104
2.252 Attribute fRSPartnerAuthLevel 105
2.253 Attribute fRSPrimaryMember 105
2.254 Attribute fRSReplicaSetGUID 105
2.255 Attribute fRSReplicaSetType 106
2.256 Attribute fRSRootPath.....106
2.257 Attribute fRSRootSecurity.....106
2.258 Attribute fRSServiceCommand 107
2.259 Attribute fRSServiceCommandStatus.....107
2.260 Attribute fRSStagingPath.....108
2.261 Attribute fRSTimeLastCommand.....108
2.262 Attribute fRSTimeLastConfigChange 108
2.263 Attribute fRSUpdateTimeout 109
2.264 Attribute fRSVersion.....109
2.265 Attribute fRSVersionGUID 109
2.266 Attribute fRSWorkingPath.....110
2.267 Attribute fSMORoleOwner.....110
2.268 Attribute garbageCollPeriod.....110
2.269 Attribute gecos 111
2.270 Attribute generatedConnection 111
2.271 Attribute generationQualifier 111
2.272 Attribute gidNumber.....112
2.273 Attribute givenName.....112
2.274 Attribute globalAddressList.....113
2.275 Attribute globalAddressList2 113
2.276 Attribute governsID.....113
2.277 Attribute gPCFileSysPath.....114
2.278 Attribute gPCFunctionalityVersion.....114
2.279 Attribute gPCMachineExtensionNames 114
2.280 Attribute gPCUserExtensionNames 115
2.281 Attribute gPCWQLFilter 115
2.282 Attribute gPLink 115
2.283 Attribute gPOptions 116

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2.284 Attribute groupAttributes 116
2.285 Attribute groupMembershipSAM 116
2.286 Attribute groupPriority 117
2.287 Attribute groupsToIgnore 117
2.288 Attribute groupType 117
2.289 Attribute hasMasterNCs 118
2.290 Attribute hasPartialReplicaNCs 118
2.291 Attribute helpData16 119
2.292 Attribute helpData32 119
2.293 Attribute helpFileName 120
2.294 Attribute hideFromAB 120
2.295 Attribute homeDirectory 120
2.296 Attribute homeDrive 121
2.297 Attribute homePhone 121
2.298 Attribute homePostalAddress 122
2.299 Attribute host 122
2.300 Attribute houseIdentifier 122
2.301 Attribute iconPath 123
2.302 Attribute implementedCategories 123
2.303 Attribute indexedScopes 123
2.304 Attribute info 124
2.305 Attribute initialAuthIncoming 124
2.306 Attribute initialAuthOutgoing 125
2.307 Attribute initials 125
2.308 Attribute installUiLevel 125
2.309 Attribute instanceType 126
2.310 Attribute internationalISDNNumber 126
2.311 Attribute interSiteTopologyFailover 127
2.312 Attribute interSiteTopologyGenerator 127
2.313 Attribute interSiteTopologyRenew 128
2.314 Attribute invocationId 128
2.315 Attribute ipHostNumber 129
2.316 Attribute ipNetmaskNumber 129
2.317 Attribute ipNetworkNumber 129
2.318 Attribute ipPhone 130
2.319 Attribute ipProtocolNumber 130
2.320 Attribute ipsecData 130
2.321 Attribute ipsecDataType 131
2.322 Attribute ipsecFilterReference 131
2.323 Attribute ipsecID 131
2.324 Attribute ipsecISAKMPReference 132
2.325 Attribute ipsecName 132
2.326 Attribute iPSECNegotiationPolicyAction 132
2.327 Attribute ipsecNegotiationPolicyReference 133
2.328 Attribute iPSECNegotiationPolicyType 133
2.329 Attribute ipsecNFAReference 133
2.330 Attribute ipsecOwnersReference 134
2.331 Attribute ipsecPolicyReference 134
2.332 Attribute ipServicePort 134
2.333 Attribute ipServiceProtocol 135
2.334 Attribute isCriticalSystemObject 135
2.335 Attribute isDefunct 135
2.336 Attribute isDeleted 136
2.337 Attribute isEphemeral 136
2.338 Attribute isMemberOfPartialAttributeSet 137
2.339 Attribute isPrivilegeHolder 137
2.340 Attribute isRecycled 137
2.341 Attribute isSingleValued 138

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2.342 Attribute jpegPhoto 138
2.343 Attribute keywords 138
2.344 Attribute knowledgeInformation 139
2.345 Attribute l 139
2.346 Attribute labeledURI 140
2.347 Attribute lastBackupRestorationTime 140
2.348 Attribute lastContentIndexed 140
2.349 Attribute lastKnownParent 141
2.350 Attribute lastLogoff 141
2.351 Attribute lastLogon 142
2.352 Attribute lastLogonTimestamp 142
2.353 Attribute lastSetTime 142
2.354 Attribute lastUpdateSequence 143
2.355 Attribute lDAPAdminLimits 143
2.356 Attribute lDAPDisplayName 144
2.357 Attribute lDAPIPDenyList 144
2.358 Attribute lSACreationTime 144
2.359 Attribute lSAModifiedCount 145
2.360 Attribute legacyExchangeDN 145
2.361 Attribute linkID 145
2.362 Attribute linkTrackSecret 146
2.363 Attribute lmPwdHistory 146
2.364 Attribute localeID 147
2.365 Attribute localizationDisplayId 147
2.366 Attribute localizedDescription 147
2.367 Attribute localPolicyFlags 148
2.368 Attribute localPolicyReference 148
2.369 Attribute location 148
2.370 Attribute lockoutDuration 149
2.371 Attribute lockOutObservationWindow 149
2.372 Attribute lockoutThreshold 150
2.373 Attribute lockoutTime 150
2.374 Attribute loginShell 150
2.375 Attribute logonCount 151
2.376 Attribute logonHours 151
2.377 Attribute logonWorkstation 152

3 Change Tracking 153

4 Index 154

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1 Introduction

Active Directory Schema Attributes A-L contains a partial list of the objects that exist in the Active Directory schema; it contains schema objects of type "attribute" whose names start with the letters A through L. Active Directory and all associated terms and concepts are described in the document titled "Active Directory Technical Specification", which has the following normative reference:

[MS-ADTS] Microsoft Corporation, "Active Directory Technical Specification".

Note This document is not intended to stand on its own; it is intended to act as an appendix to the Active Directory Technical Specification, as specified in the normative reference shown above. For details about the Active Directory schema, see [MS-ADTS] section 3.1.1.2 (Active Directory Schema).

Note The object definitions in this document are also available for download in LDAP Data Interchange Format (LDIF) at the following location: [MSFT-ADSCHEMA].

1.1 References

[JFIF] Hamilton, E., "JPEG File Interchange Format, Version 1.02", September 1992, http://www.w3.org/Graphics/JPEG/jfif.txt

[MS-ADA3] Microsoft Corporation, "Active Directory Schema Attributes N-Z".

[MS-ADOD] Microsoft Corporation, "Active Directory Protocols Overview".

[MS-ADTS] Microsoft Corporation, "Active Directory Technical Specification".

[MS-DTYP] Microsoft Corporation, "Windows Data Types".

[MS-GPIPSEC] Microsoft Corporation, "Group Policy: IP Security (IPsec) Protocol Extension".

[MS-GPOL] Microsoft Corporation, "Group Policy: Core Protocol".

[MS-LSAD] Microsoft Corporation, "Local Security Authority (Domain Policy) Remote Protocol".

[MS-SAMR] Microsoft Corporation, "Security Account Manager (SAM) Remote Protocol (Client-to-Server)".

[MSDN-ACL] Microsoft Corporation, "ACL structure", http://msdn.microsoft.com/en-us/library/aa374931.aspx

[MSDN-CP] Microsoft Corporation, "Code Page Identifiers", http://msdn.microsoft.com/en-us/library/dd317756(VS.85).aspx

[MSDN-ExtUserIntDirObj] Microsoft Corporation, "Extending the User Interface for Directory Objects", http://msdn.microsoft.com/en-us/library/ms676902.aspx

[MSDN-GroupType] Microsoft Corporation, "Group-Type", http://msdn.microsoft.com/en-us/library/ms675935.aspx

[MSFT-ADSCHEMA] Microsoft Corporation, "Combined Active Directory Schema Classes and Attributes for Windows Server", February 2011, http://www.microsoft.com/downloads/en/details.aspx?displaylang=en&FamilyID=da2fc73a-3d35-484c-9bea-f023dcba7275

[RFC2251] Wahl, M., Howes, T., and Kille, S., "Lightweight Directory Access Protocol (v3)", RFC 2251, December 1997, http://www.ietf.org/rfc/rfc2251.txt

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[RFC2307] Howard, L., "An Approach for Using LDAP as a Network Information Service", RFC 2307, March 1998, http://www.ietf.org/rfc/rfc2307.txt

[RFC2849] Good, G., "The LDAP Data Interchange Format (LDIF) - Technical Specification", RFC 2849, June 2000, http://www.ietf.org/rfc/rfc2849.txt

[X500] ITU-T, "Information Technology - Open Systems Interconnection - The Directory: Overview of Concepts, Models and Services", Recommendation X.500, August 2005, http://www.itu.int/rec/T-REC-X.500-200508-S/en

Note There is a charge to download the specification.

[X509] ITU-T, "Information Technology - Open Systems Interconnection - The Directory: Public-Key and Attribute Certificate Frameworks", Recommendation X.509, August 2005, http://www.itu.int/rec/T-REC-X.509/en

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2 Attributes

The following sections specify attributes in the Active Directory schema whose names start with the letters A through L.

These sections normatively specify the schema definition of each attribute and version-specific behavior of those schema definitions (such as when the attribute was added to the schema). Additionally, as an aid to the reader some of the sections include informative notes about how the attribute can be used.

Note Lines of text in the attribute definitions that are excessively long have been "folded" in accordance with [RFC2849] Note 2.

2.1 Attribute accountExpires

This attribute specifies the date the account expires. This value represents the number of 100-nanosecond intervals since January 1, 1601, Coordinated Universal Time (Greenwich Mean Time). A value of 0 or 0x7FFFFFFFFFFFFFFF (9223372036854775807) indicates that the account never expires.

```
cn: Account-Expires
ldapDisplayName: accountExpires
attributeId: 1.2.840.113556.1.4.159
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: bf967915-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fCOPY
attributeSecurityGuid: 4c164200-20c0-11d0-a768-00aa006e0529
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server operating system, Windows Server 2003 operating system, Windows Server 2003 R2 operating system, Windows Server 2008 operating system, Windows Server 2008 R2 operating system, Windows Server 2012 operating system, Windows Server 2012 R2 operating system, and Windows Server 2016 operating system.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.2 Attribute accountNameHistory

This attribute specifies the length of time the account has been active.

```
cn: Account-Name-History
ldapDisplayName: accountNameHistory
attributeId: 1.2.840.113556.1.4.1307
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 031952ec-3b72-11d2-90cc-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.3 Attribute aCSAggregateTokenRatePerUser

This attribute specifies the maximum quality of service token rate for any user for all flows.

```
cn: ACS-Aggregate-Token-Rate-Per-User
ldapDisplayName: aCSAggregateTokenRatePerUser
attributeId: 1.2.840.113556.1.4.760
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 7f56127d-5301-11d1-a9c5-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.4 Attribute aCSAllocableRSVPBandwidth

This attribute specifies the maximum bandwidth that can be reserved.

```
cn: ACS-Allocable-RSVP-Bandwidth
ldapDisplayName: aCSAllocableRSVPBandwidth
attributeId: 1.2.840.113556.1.4.766
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 7f561283-5301-11d1-a9c5-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.5 Attribute aCSCacheTimeout

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Cache-Timeout
ldapDisplayName: aCSCacheTimeout
attributeId: 1.2.840.113556.1.4.779
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 1cb355a1-56d0-11d1-a9c6-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.6 Attribute aCSDirection

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Direction
ldapDisplayName: aCSDirection
attributeId: 1.2.840.113556.1.4.757
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 7f56127a-5301-11d1-a9c5-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.7 Attribute aCSDSBMDeadTime

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-DSBM-DeadTime
ldapDisplayName: aCSDSBMDeadTime
attributeId: 1.2.840.113556.1.4.778
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 1cb355a0-56d0-11d1-a9c6-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.8 Attribute aCSDSBMPriority

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-DSBM-Priority
ldapDisplayName: aCSDSBMPriority
attributeId: 1.2.840.113556.1.4.776
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 1cb3559e-56d0-11d1-a9c6-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.9 Attribute aCSDSBMRefresh

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-DSBM-Refresh
ldapDisplayName: aCSDSBMRefresh
attributeId: 1.2.840.113556.1.4.777
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 1cb3559f-56d0-11d1-a9c6-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.10 Attribute aCSEnableACSService

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Enable-ACS-Service
ldapDisplayName: aCSEnableACSService
attributeId: 1.2.840.113556.1.4.770
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 7f561287-5301-11d1-a9c5-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.11 Attribute aCSEnableRSVPAccounting

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Enable-RSVP-Accounting
ldapDisplayName: aCSEnableRSVPAccounting
attributeId: 1.2.840.113556.1.4.899
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: f072230e-aef5-11d1-bdcf-0000f80367c1
systemOnly: FALSE
searchFlags: 0
```


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```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.12 Attribute aCSEnableRSVPMessageLogging

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Enable-RSVP-Message-Logging
ldapDisplayName: aCSEnableRSVPMessageLogging
attributeId: 1.2.840.113556.1.4.768
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 7f561285-5301-11d1-a9c5-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.13 Attribute aCSEventLogLevel

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Event-Log-Level
ldapDisplayName: aCSEventLogLevel
attributeId: 1.2.840.113556.1.4.769
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 7f561286-5301-11d1-a9c5-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.14 Attribute aCSIdentityName

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Identity-Name
ldapDisplayName: aCSIdentityName
attributeId: 1.2.840.113556.1.4.784
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
```


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```
schemaIdGuid: dab029b6-ddf7-11d1-90a5-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.15 Attribute aCSMaxAggregatePeakRatePerUser

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Max-Aggregate-Peak-Rate-Per-User
ldapDisplayName: aCSMaxAggregatePeakRatePerUser
attributeId: 1.2.840.113556.1.4.897
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: f072230c-aef5-11d1-bdcf-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.16 Attribute aCSMaxDurationPerFlow

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Max-Duration-Per-Flow
ldapDisplayName: aCSMaxDurationPerFlow
attributeId: 1.2.840.113556.1.4.761
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 7f56127e-5301-11d1-a9c5-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.17 Attribute aCSMaximumSDUSize

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Maximum-SDU-Size
ldapDisplayName: aCSMaximumSDUSize
attributeId: 1.2.840.113556.1.4.1314
```


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```
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 87a2d8f9-3b90-11d2-90cc-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.18 Attribute aCSMaxNoOfAccountFiles

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Max-No-Of-Account-Files
ldapDisplayName: aCSMaxNoOfAccountFiles
attributeId: 1.2.840.113556.1.4.901
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: f0722310-aef5-11d1-bdcf-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.19 Attribute aCSMaxNoOfLogFiles

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Max-No-Of-Log-Files
ldapDisplayName: aCSMaxNoOfLogFiles
attributeId: 1.2.840.113556.1.4.774
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 1cb3559c-56d0-11d1-a9c6-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.20 Attribute aCSMaxPeakBandwidth

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

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```
cn: ACS-Max-Peak-Bandwidth
ldapDisplayName: aCSMaxPeakBandwidth
attributeId: 1.2.840.113556.1.4.767
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 7f561284-5301-11d1-a9c5-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.21 Attribute aCSMaxPeakBandwidthPerFlow

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Max-Peak-Bandwidth-Per-Flow
ldapDisplayName: aCSMaxPeakBandwidthPerFlow
attributeId: 1.2.840.113556.1.4.759
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 7f56127c-5301-11d1-a9c5-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.22 Attribute aCSMaxSizeOfRSVPAccountFile

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Max-Size-Of-RSVP-Account-File
ldapDisplayName: aCSMaxSizeOfRSVPAccountFile
attributeId: 1.2.840.113556.1.4.902
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: f0722311-aef5-11d1-bdcf-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.23 Attribute aCSMaxSizeOfRSVPLogFile

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Max-Size-Of-RSVP-Log-File
ldapDisplayName: aCSMaxSizeOfRSVPLogFile
attributeId: 1.2.840.113556.1.4.775
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 1cb3559d-56d0-11d1-a9c6-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.24 Attribute aCSMaxTokenBucketPerFlow

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Max-Token-Bucket-Per-Flow
ldapDisplayName: aCSMaxTokenBucketPerFlow
attributeId: 1.2.840.113556.1.4.1313
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 81f6e0df-3b90-11d2-90cc-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.25 Attribute aCSMaxTokenRatePerFlow

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Max-Token-Rate-Per-Flow
ldapDisplayName: aCSMaxTokenRatePerFlow
attributeId: 1.2.840.113556.1.4.758
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 7f56127b-5301-11d1-a9c5-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.26 Attribute aCSMinimumDelayVariation

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Minimum-Delay-Variation
ldapDisplayName: aCSMinimumDelayVariation
attributeId: 1.2.840.113556.1.4.1317
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 9c65329b-3b90-11d2-90cc-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.27 Attribute aCSMinimumLatency

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Minimum-Latency
ldapDisplayName: aCSMinimumLatency
attributeId: 1.2.840.113556.1.4.1316
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 9517fefb-3b90-11d2-90cc-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.28 Attribute aCSMinimumPolicedSize

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Minimum-Policed-Size
ldapDisplayName: aCSMinimumPolicedSize
attributeId: 1.2.840.113556.1.4.1315
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 8d0e7195-3b90-11d2-90cc-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
```


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```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.29 Attribute aCSNonReservedMaxSDUSize

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Non-Reserved-Max-SDU-Size
ldapDisplayName: aCSNonReservedMaxSDUSize
attributeId: 1.2.840.113556.1.4.1320
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: aec2cfe3-3b90-11d2-90cc-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.30 Attribute aCSNonReservedMinPolicedSize

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Non-Reserved-Min-Policed-Size
ldapDisplayName: aCSNonReservedMinPolicedSize
attributeId: 1.2.840.113556.1.4.1321
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: b6873917-3b90-11d2-90cc-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.31 Attribute aCSNonReservedPeakRate

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Non-Reserved-Peak-Rate
ldapDisplayName: aCSNonReservedPeakRate
attributeId: 1.2.840.113556.1.4.1318
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
```


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```
schemaIdGuid: a331a73f-3b90-11d2-90cc-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.32 Attribute aCSNonReservedTokenSize

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Non-Reserved-Token-Size
ldapDisplayName: aCSNonReservedTokenSize
attributeId: 1.2.840.113556.1.4.1319
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: a916d7c9-3b90-11d2-90cc-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.33 Attribute aCSNonReservedTxLimit

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Non-Reserved-Tx-Limit
ldapDisplayName: aCSNonReservedTxLimit
attributeId: 1.2.840.113556.1.4.780
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 1cb355a2-56d0-11d1-a9c6-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.34 Attribute aCSNonReservedTxSize

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Non-Reserved-Tx-Size
ldapDisplayName: aCSNonReservedTxSize
attributeId: 1.2.840.113556.1.4.898
```


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```
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: f072230d-aef5-11d1-bdcf-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.35 Attribute aCSPermissionBits

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Permission-Bits
ldapDisplayName: aCSPermissionBits
attributeId: 1.2.840.113556.1.4.765
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 7f561282-5301-11d1-a9c5-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.36 Attribute aCSPolicyName

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Policy-Name
ldapDisplayName: aCSPolicyName
attributeId: 1.2.840.113556.1.4.772
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 1cb3559a-56d0-11d1-a9c6-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.37 Attribute aCSPriority

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

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```
cn: ACS-Priority
ldapDisplayName: aCSPriority
attributeId: 1.2.840.113556.1.4.764
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 7f561281-5301-11d1-a9c5-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.38 Attribute aCSRSVPAccountFilesLocation

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-RSVP-Account-Files-Location
ldapDisplayName: aCSRSVPAccountFilesLocation
attributeId: 1.2.840.113556.1.4.900
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: f072230f-aef5-11d1-bdcf-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.39 Attribute aCSRSVPLogFilesLocation

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-RSVP-Log-Files-Location
ldapDisplayName: aCSRSVPLogFilesLocation
attributeId: 1.2.840.113556.1.4.773
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 1cb3559b-56d0-11d1-a9c6-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.40 Attribute aCSServerList

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Server-List
ldapDisplayName: aCSServerList
attributeId: 1.2.840.113556.1.4.1312
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 7cbd59a5-3b90-11d2-90cc-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.41 Attribute aCSServiceType

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Service-Type
ldapDisplayName: aCSServiceType
attributeId: 1.2.840.113556.1.4.762
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 7f56127f-5301-11d1-a9c5-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.42 Attribute aCSTimeOfDay

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Time-Of-Day
ldapDisplayName: aCSTimeOfDay
attributeId: 1.2.840.113556.1.4.756
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 7f561279-5301-11d1-a9c5-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.43 Attribute aCSTotalNoOfFlows

This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: ACS-Total-No-Of-Flows
ldapDisplayName: aCSTotalNoOfFlows
attributeId: 1.2.840.113556.1.4.763
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 7f561280-5301-11d1-a9c5-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.44 Attribute additionalTrustedServiceNames

This attribute specifies a list of services in the domain that can be trusted. This attribute is not necessary for Active Directory to function. The protocol does not define a format beyond that required by the schema.

```
cn: Additional-Trusted-Service-Names
ldapDisplayName: additionalTrustedServiceNames
attributeId: 1.2.840.113556.1.4.889
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 032160be-9824-11d1-aec0-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.45 Attribute addressBookRoots

This attribute is used by Microsoft Exchange Server and is not necessary for Active Directory functioning. It specifies the trees of address book containers to appear in the Messaging Application Programming Interface (MAPI) address book.

```
cn: Address-Book-Roots
ldapDisplayName: addressBookRoots
attributeId: 1.2.840.113556.1.4.1244
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
```


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```
schemaIdGuid: f70b6e48-06f4-11d2-aa53-00c04fd7d83a
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.46 Attribute addressBookRoots2

This attribute is used by Exchange Server and is not necessary for Active Directory functioning. It specifies the trees of address book containers to appear in the MAPI address book. Similar to addressBookRoots, it differs by being a linked attribute.

```
cn: Address-Book-Roots2
ldapDisplayName: addressBookRoots2
attributeId: 1.2.840.113556.1.4.2046
attributeSyntax: 2.5.5.1
linkID: 2122
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 508ca374-a511-4e4e-9f4f-856f61a6b7e4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.47 Attribute addressEntryDisplayTable

This attribute is used by Exchange Server and is not necessary for Active Directory functioning. It specifies the display table for an address entry.

```
cn: Address-Entry-Display-Table
ldapDisplayName: addressEntryDisplayTable
attributeId: 1.2.840.113556.1.2.324
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 5fd42461-1262-11d0-a060-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 32768
mapiID: 32791
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.48 Attribute addressEntryDisplayTableMSDOS

This attribute is used by Exchange Server and is not necessary for Active Directory functioning. It specifies the MAPI display table for an address entry for an MS-DOS client.

```
cn: Address-Entry-Display-Table-MSDOS
ldapDisplayName: addressEntryDisplayTableMSDOS
attributeId: 1.2.840.113556.1.2.400
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 5fd42462-1262-11d0-a060-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 32768
mapiID: 32839
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.49 Attribute addressSyntax

This attribute is used by Exchange Server and is not necessary for Active Directory functioning. It specifies a grammar for encoding the display table properties as a string.

```
cn: Address-Syntax
ldapDisplayName: addressSyntax
attributeId: 1.2.840.113556.1.2.255
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 5fd42463-1262-11d0-a060-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 4096
mapiID: 32792
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.50 Attribute addressType

This attribute is used by Exchange Server and is not necessary for Active Directory functioning. It specifies a character string describing the format of the user's address. Address types map to address

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formats. That is, by looking at a recipient's address type, client applications can determine how to format an address appropriate for the recipient.

```
cn: Address-Type
ldapDisplayName: addressType
attributeId: 1.2.840.113556.1.2.350
attributeSyntax: 2.5.5.4
omSyntax: 20
isSingleValued: TRUE
schemaIdGuid: 5fd42464-1262-11d0-a060-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 32
mapiID: 32840
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.51 Attribute adminContextMenu

This attribute specifies the order number and GUID of the context menu to be used on administration screens. GUID is defined in [MS-DTYP] section 2.3.4.

```
cn: Admin-Context-Menu
ldapDisplayName: adminContextMenu
attributeId: 1.2.840.113556.1.4.614
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 553fd038-f32e-11d0-b0bc-00c04fd8dca6
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.52 Attribute adminCount

This attribute specifies that a given object has had its access control lists (ACLs) changed to a more secure value by the Active Directory system [MS-ADOD] because it is a member of one of the administrative groups, either directly or transitively. For more information on the ACL structure, see [MSDN-ACL].

```
cn: Admin-Count
ldapDisplayName: adminCount
attributeId: 1.2.840.113556.1.4.150
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf967918-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
```


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```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.53 Attribute adminDescription

This attribute specifies the description displayed on administration screens.

```
cn: Admin-Description
ldapDisplayName: adminDescription
attributeId: 1.2.840.113556.1.2.226
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf967919-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 1024
attributeSecurityGuid: 59ba2f42-79a2-11d0-9020-00c04fc2d3cf
mapiID: 32842
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.54 Attribute adminDisplayName

This attribute specifies the name to be displayed on administration screens.

```
cn: Admin-Display-Name
ldapDisplayName: adminDisplayName
attributeId: 1.2.840.113556.1.2.194
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf96791a-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 256
mapiID: 32843
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

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2.55 Attribute adminMultiselectPropertyPages

This attribute specifies the GUID of a Component Object Model (COM) object that implements multiselect property pages for the Active Directory Users and Computers snap-in.

```
cn: Admin-Multiselect-Property-Pages
ldapDisplayName: adminMultiselectPropertyPages
attributeId: 1.2.840.113556.1.4.1690
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 18f9b67d-5ac6-4b3b-97db-d0a406afb7ba
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.56 Attribute adminPropertyPages

This attribute specifies the GUID of the property pages for an object to be displayed on Active Directory administration screens. For more information, see the document, "Extending the User Interface for Directory Objects" [MSDN-ExtUserIntDirObj].

```
cn: Admin-Property-Pages
ldapDisplayName: adminPropertyPages
attributeId: 1.2.840.113556.1.4.562
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 52458038-ca6a-11d0-afff-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.57 Attribute allowedAttributes

This attribute specifies attributes that will be permitted to be assigned to a class.

```
cn: Allowed-Attributes
ldapDisplayName: allowedAttributes
attributeId: 1.2.840.113556.1.4.913
attributeSyntax: 2.5.5.2
omSyntax: 6
isSingleValued: FALSE
schemaIdGuid: 9a7ad940-ca53-11d1-bbd0-0080c76670c0
systemOnly: TRUE
searchFlags: 0
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED |
 FLAG_DOMAIN_DISALLOW_RENAME
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.58 Attribute allowedAttributesEffective

This attribute specifies a list of attributes that can be modified on the object.

```
cn: Allowed-Attributes-Effective
ldapDisplayName: allowedAttributesEffective
attributeId: 1.2.840.113556.1.4.914
attributeSyntax: 2.5.5.2
omSyntax: 6
isSingleValued: FALSE
schemaIdGuid: 9a7ad941-ca53-11d1-bbd0-0080c76670c0
systemOnly: TRUE
searchFlags: 0
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
systemFlags: FLAG SCHEMA BASE OBJECT | FLAG ATTR IS CONSTRUCTED |
 FLAG DOMAIN DISALLOW RENAME
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.59 Attribute allowedChildClasses

This attribute specifies classes that can be contained by a class.

```
cn: Allowed-Child-Classes
ldapDisplayName: allowedChildClasses
attributeId: 1.2.840.113556.1.4.911
attributeSyntax: 2.5.5.2
omSyntax: 6
isSingleValued: FALSE
schemaIdGuid: 9a7ad942-ca53-11d1-bbd0-0080c76670c0
systemOnly: TRUE
searchFlags: 0
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED |
 FLAG_DOMAIN_DISALLOW_RENAME
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.60 Attribute allowedChildClassesEffective

This attribute specifies a list of classes that can be modified.

```
cn: Allowed-Child-Classes-Effective
```


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```
ldapDisplayName: allowedChildClassesEffective
attributeId: 1.2.840.113556.1.4.912
attributeSyntax: 2.5.5.2
omSyntax: 6
isSingleValued: FALSE
schemaIdGuid: 9a7ad943-ca53-11d1-bbd0-0080c76670c0
systemOnly: TRUE
searchFlags: 0
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED |
 FLAG_DOMAIN_DISALLOW_RENAME
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.61 Attribute altSecurityIdentities

This attribute specifies a given user mapping for [X509] certificates or external Kerberos user accounts for the purpose of authentication.

```
cn: Alt-Security-Identities
ldapDisplayName: altSecurityIdentities
attributeId: 1.2.840.113556.1.4.867
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 00fbf30c-91fe-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: fATTINDEX
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG SCHEMA BASE OBJECT |
 FLAG_ATTR_REQ_PARTIAL_SET_MEMBER
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.62 Attribute aNR

This attribute specifies whether ambiguous name resolution is to be used when choosing between objects.

```
cn: ANR
ldapDisplayName: aNR
attributeId: 1.2.840.113556.1.4.1208
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 45b01500-c419-11d1-bbc9-0080c76670c0
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED |
```


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```
 FLAG_DOMAIN_DISALLOW_RENAME
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.63 Attribute applicationName

This attribute is used to store the name of the application.

```
cn: Application-Name
ldapDisplayName: applicationName
attributeId: 1.2.840.113556.1.4.218
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: dd712226-10e4-11d0-a05f-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 64
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.64 Attribute appliesTo

This attribute specifies the list of object classes that an extended right applies to. For more information on Active Directory object classes, see [MS-ADTS].

```
cn: Applies-To
ldapDisplayName: appliesTo
attributeId: 1.2.840.113556.1.4.341
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 8297931d-86d3-11d0-afda-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
rangeLower: 36
rangeUpper: 36
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.65 Attribute appSchemaVersion

This attribute specifies the schema version of the directory. It is used to provide correct behavior across schema changes. For more information on the schema, see [MS-ADTS] section 3.1.1.2.

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```
cn: App-Schema-Version
ldapDisplayName: appSchemaVersion
attributeId: 1.2.840.113556.1.4.848
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 96a7dd65-9118-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.66 Attribute assetNumber

This attribute is used to store the tracking number of the object.

```
cn: Asset-Number
ldapDisplayName: assetNumber
attributeId: 1.2.840.113556.1.4.283
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: ba305f75-47e3-11d0-a1a6-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.67 Attribute assistant

This attribute can be used to store the distinguished name of an administrative assistant for a user.

```
cn: Assistant
ldapDisplayName: assistant
attributeId: 1.2.840.113556.1.4.652
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 0296c11c-40da-11d1-a9c0-0000f80367c1
systemOnly: FALSE
searchFlags: fCOPY
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.68 Attribute associatedDomain

The associatedDomain attribute type specifies a fully qualified domain name (FQDN) (2) ([MS-ADTS] section 1.1) associated with an object.

```
cn: associatedDomain
ldapDisplayName: associatedDomain
attributeId: 0.9.2342.19200300.100.1.37
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: FALSE
schemaIdGuid: 3320fc38-c379-4c17-a510-1bdf6133c5da
systemOnly: FALSE
searchFlags: 0
rangeUpper: 256
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.69 Attribute associatedName

The associatedName attribute type specifies an entry in the directory associated with a DNS domain.

```
cn: associatedName
ldapDisplayName: associatedName
attributeId: 0.9.2342.19200300.100.1.38
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: f7fbfc45-85ab-42a4-a435-780e62f7858b
systemOnly: FALSE
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.70 Attribute assocNTAccount

The Windows NT operating system account that applies to this object.

```
cn: Assoc-NT-Account
ldapDisplayName: assocNTAccount
attributeId: 1.2.840.113556.1.4.1213
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 398f63c0-ca60-11d1-bbd1-0000f81f10c0
systemOnly: FALSE
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.71 Attribute attributeCertificateAttribute

A digitally signed or certified identity and set of attributes. Used to bind authorization information to an identity.

```
cn: attributeCertificateAttribute
ldapDisplayName: attributeCertificateAttribute
attributeId: 2.5.4.58
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: fa4693bb-7bc2-4cb9-81a8-c99c43b7905e
systemOnly: FALSE
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.72 Attribute attributeDisplayNames

The name to be displayed for this object.

```
cn: Attribute-Display-Names
ldapDisplayName: attributeDisplayNames
attributeId: 1.2.840.113556.1.4.748
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: cb843f80-48d9-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.73 Attribute attributeID

This attribute specifies the unique X.500 object identifier (OID) for identifying an attribute. For more information, see [X500].

```
cn: Attribute-ID
ldapDisplayName: attributeID
attributeId: 1.2.840.113556.1.2.30
attributeSyntax: 2.5.5.2
omSyntax: 6
isSingleValued: TRUE
schemaIdGuid: bf967922-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: fPRESERVEONDELETE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.74 Attribute attributeSecurityGUID

This attribute specifies the GUID used to apply security credentials to a set of objects.

```
cn: Attribute-Security-GUID
ldapDisplayName: attributeSecurityGUID
attributeId: 1.2.840.113556.1.4.149
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: bf967924-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 16
rangeUpper: 16
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.75 Attribute attributeSyntax

This attribute specifies the OID for the syntax for this attribute.

```
cn: Attribute-Syntax
ldapDisplayName: attributeSyntax
attributeId: 1.2.840.113556.1.2.32
attributeSyntax: 2.5.5.2
omSyntax: 6
isSingleValued: TRUE
schemaIdGuid: bf967925-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: fPRESERVEONDELETE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.76 Attribute attributeTypes

A multivalued property containing strings that represent each attribute in the schema.

```
cn: Attribute-Types
ldapDisplayName: attributeTypes
attributeId: 2.5.21.5
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 9a7ad944-ca53-11d1-bbd0-0080c76670c0
```


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```
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED |
 FLAG_DOMAIN_DISALLOW_RENAME
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.77 Attribute audio

This attribute can be used to store audio.

```
cn: audio
ldapDisplayName: audio
attributeId: 0.9.2342.19200300.100.1.55
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: d0e1d224-e1a0-42ce-a2da-793ba5244f35
systemOnly: FALSE
searchFlags: 0
rangeUpper: 250000
showInAdvancedViewOnly: FALSE
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.78 Attribute auditingPolicy

This attribute specifies the auditing policy for the local policy.

```
cn: Auditing-Policy
ldapDisplayName: auditingPolicy
attributeId: 1.2.840.113556.1.4.202
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 6da8a4fe-0e52-11d0-a286-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

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2.79 Attribute authenticationOptions

This attribute specifies the authentication options used in the Active Directory Service Interface (ADSI) to bind to directory services objects.

```
cn: Authentication-Options
ldapDisplayName: authenticationOptions
attributeId: 1.2.840.113556.1.4.11
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf967928-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.80 Attribute authorityRevocationList

Cross-certificate, certificate revocation list.

```
cn: Authority-Revocation-List
ldapDisplayName: authorityRevocationList
attributeId: 2.5.4.38
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: 1677578d-47f3-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
rangeUpper: 10485760
mapiID: 32806
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

In Windows 2000 Server, rangeUpper is not defined.

2.81 Attribute auxiliaryClass

This attribute specifies the list of auxiliary classes to be associated with this class.

```
cn: Auxiliary-Class
ldapDisplayName: auxiliaryClass
attributeId: 1.2.840.113556.1.2.351
attributeSyntax: 2.5.5.2
omSyntax: 6
isSingleValued: FALSE
schemaIdGuid: bf96792c-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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```
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.82 Attribute badPasswordTime

This attribute specifies the last time and date that an attempt to log on to this account was made with an invalid password. This value is stored as a large integer that represents the number of 100 nanosecond intervals since January 1, 1601 (UTC). A value of zero means that the last invalid password time is unknown.

```
cn: Bad-Password-Time
ldapDisplayName: badPasswordTime
attributeId: 1.2.840.113556.1.4.49
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: bf96792d-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.83 Attribute badPwdCount

This attribute specifies the number of times the user tried to log on to the account by using an incorrect password. A value of 0 indicates that the value is unknown.

```
cn: Bad-Pwd-Count
ldapDisplayName: badPwdCount
attributeId: 1.2.840.113556.1.4.12
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf96792e-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: 5f202010-79a5-11d0-9020-00c04fc2d4cf
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

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2.84 Attribute birthLocation

This attribute specifies the location of a system object, such as a file, at the time that it was originally created.

```
cn: Birth-Location
ldapDisplayName: birthLocation
attributeId: 1.2.840.113556.1.4.332
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 1f0075f9-7e40-11d0-afd6-00c04fd930c9
systemOnly: FALSE
searchFlags: fATTINDEX
rangeLower: 32
rangeUpper: 32
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.85 Attribute bootFile

This attribute specifies the boot image name.

```
cn: BootFile
ldapDisplayName: bootFile
attributeId: 1.3.6.1.1.1.1.24
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: FALSE
schemaIdGuid: e3f3cb4e-0f20-42eb-9703-d2ff26e52667
systemOnly: FALSE
searchFlags: 0
rangeUpper: 10240
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.86 Attribute bootParameter

This attribute specifies the rpc.bootparameter.

```
cn: BootParameter
ldapDisplayName: bootParameter
attributeId: 1.3.6.1.1.1.1.23
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: FALSE
schemaIdGuid: d72a0750-8c7c-416e-8714-e65f11e908be
systemOnly: FALSE
searchFlags: 0
rangeUpper: 10240
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.87 Attribute bridgeheadServerListBL

This attribute is the back link attribute of bridgeheadServerList and contains the list of servers that are bridgeheads for Active Directory replication.

```
cn: Bridgehead-Server-List-BL
ldapDisplayName: bridgeheadServerListBL
attributeId: 1.2.840.113556.1.4.820
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: d50c2cdb-8951-11d1-aebc-0000f80367c1
systemOnly: TRUE
searchFlags: 0
linkID: 99
systemFlags: FLAG SCHEMA BASE OBJECT | FLAG ATTR NOT REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.88 Attribute bridgeheadTransportList

This attribute specifies the replication transports for which this server is an Active Directory bridgehead DC.

```
cn: Bridgehead-Transport-List
ldapDisplayName: bridgeheadTransportList
attributeId: 1.2.840.113556.1.4.819
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: d50c2cda-8951-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
linkID: 98
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.89 Attribute buildingName

This attribute specifies the name of the building where an organization or organizational unit is based.

```
cn: buildingName
ldapDisplayName: buildingName
attributeId: 0.9.2342.19200300.100.1.48
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: f87fa54b-b2c5-4fd7-88c0-daccb21d93c5
systemOnly: FALSE
searchFlags: 0
```


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```
rangeLower: 1
rangeUpper: 256
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.90 Attribute builtinCreationTime

This attribute is used to support replication to Windows NT 4.0 operating system domains.

```
cn: Builtin-Creation-Time
ldapDisplayName: builtinCreationTime
attributeId: 1.2.840.113556.1.4.13
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: bf96792f-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.91 Attribute builtinModifiedCount

This attribute is used to support replication to Windows NT 4.0 domains.

```
cn: Builtin-Modified-Count
ldapDisplayName: builtinModifiedCount
attributeId: 1.2.840.113556.1.4.14
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: bf967930-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.92 Attribute businessCategory

This attribute specifies descriptive text on an organizational unit.

```
cn: Business-Category
ldapDisplayName: businessCategory
attributeId: 2.5.4.15
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: bf967931-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
```


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```
searchFlags: 0
rangeLower: 1
rangeUpper: 128
mapiID: 32855
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.93 Attribute bytesPerMinute

This attribute specifies the printer data transfer rate.

```
cn: Bytes-Per-Minute
ldapDisplayName: bytesPerMinute
attributeId: 1.2.840.113556.1.4.284
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: ba305f76-47e3-11d0-a1a6-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.94 Attribute c

This attribute specifies the country/region in the address of the user. The country/region is represented as the two-character country code based on [ISO-3166].

```
cn: Country-Name
ldapDisplayName: c
attributeId: 2.5.4.6
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf967945-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fCOPY
rangeLower: 1
rangeUpper: 3
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
mapiID: 32873
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG SCHEMA BASE OBJECT |
 FLAG ATTR REQ PARTIAL SET MEMBER
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

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2.95 Attribute cACertificate

This attribute specifies certificates of trusted certificate authorities (CAs).

```
cn: CA-Certificate
ldapDisplayName: cACertificate
attributeId: 2.5.4.37
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: bf967932-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 32768
mapiID: 32771
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.96 Attribute cACertificateDN

This attribute specifies the full distinguished name from the certificate authority (CA) certificate.

```
cn: CA-Certificate-DN
ldapDisplayName: cACertificateDN
attributeId: 1.2.840.113556.1.4.697
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 963d2740-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.97 Attribute cAConnect

This attribute specifies the connection string for binding to a CA.

```
cn: CA-Connect
ldapDisplayName: cAConnect
attributeId: 1.2.840.113556.1.4.687
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 963d2735-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.98 Attribute canonicalName

This attribute specifies the name of the object in canonical format; myserver2.fabrikam.com/users/jeffsmith is an example of a distinguished name in canonical format.

This is a constructed attribute. The results returned are identical to those returned by the following Active Directory function: DsCrackNames(NULL, DS_NAME_FLAG_SYNTACTICAL_ONLY, DS_FQDN_1779_NAME, DS_CANONICAL_NAME, ...).

```
cn: Canonical-Name
ldapDisplayName: canonicalName
attributeId: 1.2.840.113556.1.4.916
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 9a7ad945-ca53-11d1-bbd0-0080c76670c0
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG SCHEMA BASE OBJECT | FLAG ATTR IS CONSTRUCTED |
 FLAG_DOMAIN_DISALLOW_RENAME
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.99 Attribute canUpgradeScript

This attribute specifies the list of application packages that can be upgraded by this application package or that can upgrade this application package.

```
cn: Can-Upgrade-Script
ldapDisplayName: canUpgradeScript
attributeId: 1.2.840.113556.1.4.815
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: d9e18314-8939-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.100 Attribute carLicense

This attribute can be used to store a vehicle license or registration plate.

```
cn: carLicense
ldapDisplayName: carLicense
```


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```
attributeId: 2.16.840.1.113730.3.1.1
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: d4159c92-957d-4a87-8a67-8d2934e01649
systemOnly: FALSE
searchFlags: 0
showInAdvancedViewOnly: FALSE
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.101 Attribute catalogs

This attribute specifies the list of catalogs indexing storage on a given computer.

```
cn: Catalogs
ldapDisplayName: catalogs
attributeId: 1.2.840.113556.1.4.675
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 7bfdcb81-4807-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.102 Attribute categories

This attribute specifies a list of category IDs (GUIDs) for categories that apply to this application.

```
cn: Categories
ldapDisplayName: categories
attributeId: 1.2.840.113556.1.4.672
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 7bfdcb7e-4807-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
rangeLower: 36
rangeUpper: 36
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.103 Attribute categoryId

This attribute specifies the ID for a component category.

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```
cn: Category-Id
ldapDisplayName: categoryId
attributeId: 1.2.840.113556.1.4.322
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 7d6c0e94-7e20-11d0-afd6-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
rangeLower: 16
rangeUpper: 16
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.104 Attribute cAUsages

This attribute specifies the list of OID/cryptographic service provider (CSP) name concatenations.

```
cn: CA-Usages
ldapDisplayName: cAUsages
attributeId: 1.2.840.113556.1.4.690
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 963d2738-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.105 Attribute cAWEBURL

This attribute specifies the URL for an HTTP connection to a CA.

```
cn: CA-WEB-URL
ldapDisplayName: cAWEBURL
attributeId: 1.2.840.113556.1.4.688
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 963d2736-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.106 Attribute certificateAuthorityObject

This attribute specifies a reference to the CA associated with a certificate revocation list (CRL) distribution point.

```
cn: Certificate-Authority-Object
ldapDisplayName: certificateAuthorityObject
attributeId: 1.2.840.113556.1.4.684
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 963d2732-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

On Windows 2000 Server, rangeUpper is not defined.

2.107 Attribute certificateRevocationList

This attribute represents a list of certificates that have been revoked.

```
cn: Certificate-Revocation-List
ldapDisplayName: certificateRevocationList
attributeId: 2.5.4.39
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 1677579f-47f3-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
rangeUpper: 10485760
mapiID: 32790
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

In Windows 2000 Server, rangeUpper is not defined.

2.108 Attribute certificateTemplates

This attribute contains information for a certificate issued by a certificate server.

```
cn: Certificate-Templates
ldapDisplayName: certificateTemplates
attributeId: 1.2.840.113556.1.4.823
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 2a39c5b1-8960-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
```


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```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.109 Attribute classDisplayName

This attribute specifies the object name to be displayed on dialogs.

```
cn: Class-Display-Name
ldapDisplayName: classDisplayName
attributeId: 1.2.840.113556.1.4.610
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 548e1c22-dea6-11d0-b010-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.110 Attribute cn

This attribute specifies the name that represents an object. It is used to perform searches.

```
cn: Common-Name
ldapDisplayName: cn
attributeId: 2.5.4.3
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf96793f-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fATTINDEX
rangeLower: 1
rangeUpper: 64
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
mapiID: 14863
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG SCHEMA BASE OBJECT |
 FLAG_ATTR_REQ_PARTIAL_SET_MEMBER
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.111 Attribute co

This attribute specifies the country/region in which the user is located.

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```
cn: Text-Country
ldapDisplayName: co
attributeId: 1.2.840.113556.1.2.131
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: f0f8ffa7-1191-11d0-a060-00aa006c33ed
systemOnly: FALSE
searchFlags: fCOPY
rangeLower: 1
rangeUpper: 128
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
mapiID: 14886
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.112 Attribute codePage

This attribute specifies the code page for the user's language of choice. The space of values is the Microsoft code page designation. For more information, see [MSDN-CP].

```
cn: Code-Page
ldapDisplayName: codePage
attributeId: 1.2.840.113556.1.4.16
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf967938-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fCOPY
rangeLower: 0
rangeUpper: 65535
attributeSecurityGuid: 59ba2f42-79a2-11d0-9020-00c04fc2d3cf
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

In Windows 2000 Server, rangeLower and rangeUpper are not defined.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.113 Attribute cOMClassID

This attribute specifies the list of ClassIDs implemented in this application package.

```
cn: COM-ClassID
ldapDisplayName: cOMClassID
attributeId: 1.2.840.113556.1.4.19
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: bf96793b-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fATTINDEX
```


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```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.114 Attribute cOMCLSID

This attribute specifies the GUID associated with this object class.

```
cn: COM-CLSID
ldapDisplayName: cOMCLSID
attributeId: 1.2.840.113556.1.4.249
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 281416d9-1968-11d0-a28f-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 36
rangeUpper: 36
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.115 Attribute cOMInterfaceID

This attribute specifies the list of interfaces implemented in this application package.

```
cn: COM-InterfaceID
ldapDisplayName: cOMInterfaceID
attributeId: 1.2.840.113556.1.4.20
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: bf96793c-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 36
rangeUpper: 36
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.116 Attribute comment

This attribute can be used to store a comment for a user.

```
cn: User-Comment
ldapDisplayName: comment
attributeId: 1.2.840.113556.1.4.156
attributeSyntax: 2.5.5.12
omSyntax: 64
```


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```
isSingleValued: TRUE
schemaIdGuid: bf967a6a-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: 59ba2f42-79a2-11d0-9020-00c04fc2d3cf
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.117 Attribute cOMOtherProgId

This attribute specifies the list of other program ID strings for the host class.

```
cn: COM-Other-Prog-Id
ldapDisplayName: cOMOtherProgId
attributeId: 1.2.840.113556.1.4.253
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 281416dd-1968-11d0-a28f-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.118 Attribute company

This attribute can be used to store a company name for a user.

```
cn: Company
ldapDisplayName: company
attributeId: 1.2.840.113556.1.2.146
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: f0f8ff88-1191-11d0-a060-00aa006c33ed
systemOnly: FALSE
searchFlags: fCOPY
rangeLower: 1
rangeUpper: 64
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
mapiID: 14870
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.119 Attribute cOMProgID

This attribute specifies the list of COM object program IDs implemented in this application package.

```
cn: COM-ProgID
ldapDisplayName: cOMProgID
attributeId: 1.2.840.113556.1.4.21
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: bf96793d-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.120 Attribute cOMTreatAsClassId

This attribute specifies the Treat-As string GUID class identifier (CLSID) for the host class.

```
cn: COM-Treat-As-Class-Id
ldapDisplayName: cOMTreatAsClassId
attributeId: 1.2.840.113556.1.4.251
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 281416db-1968-11d0-a28f-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 36
rangeUpper: 36
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.121 Attribute cOMTypelibId

This attribute specifies the list of type library IDs contained in this application package.

```
cn: COM-Typelib-Id
ldapDisplayName: cOMTypelibId
attributeId: 1.2.840.113556.1.4.254
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 281416de-1968-11d0-a28f-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 36
rangeUpper: 36
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.122 Attribute cOMUniqueLIBID

This attribute specifies a single-valued string GUID LIBID for a type library.

```
cn: COM-Unique-LIBID
ldapDisplayName: cOMUniqueLIBID
attributeId: 1.2.840.113556.1.4.250
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 281416da-1968-11d0-a28f-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 36
rangeUpper: 36
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.123 Attribute contentIndexingAllowed

Indicates whether the volume object can be content indexed.

```
cn: Content-Indexing-Allowed
ldapDisplayName: contentIndexingAllowed
attributeId: 1.2.840.113556.1.4.24
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: bf967943-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.124 Attribute contextMenu

This attribute specifies the order number and GUID of the context menu to be used for an object.

```
cn: Context-Menu
ldapDisplayName: contextMenu
attributeId: 1.2.840.113556.1.4.499
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 4d8601ee-ac85-11d0-afe3-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.125 Attribute controlAccessRights

This attribute is used by DS Security to determine which users can perform specific operations on the host object.

```
cn: Control-Access-Rights
ldapDisplayName: controlAccessRights
attributeId: 1.2.840.113556.1.4.200
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: 6da8a4fc-0e52-11d0-a286-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 16
rangeUpper: 16
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.126 Attribute cost

This attribute contains the relative cost for routing messages through a particular site connector.

```
cn: Cost
ldapDisplayName: cost
attributeId: 1.2.840.113556.1.2.135
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf967944-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
mapiID: 32872
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.127 Attribute countryCode

This attribute specifies the country code for the user's language of choice.

```
cn: Country-Code
ldapDisplayName: countryCode
attributeId: 1.2.840.113556.1.4.25
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 5fd42471-1262-11d0-a060-00aa006c33ed
```


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```
systemOnly: FALSE
searchFlags: fCOPY
rangeLower: 0
rangeUpper: 65535
attributeSecurityGuid: 59ba2f42-79a2-11d0-9020-00c04fc2d3cf
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

In Windows 2000 Server, rangeLower and rangeUpper are not defined.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.128 Attribute createDialog

This attribute specifies the GUID of the dialog for creating an associated object.

```
cn: Create-Dialog
ldapDisplayName: createDialog
attributeId: 1.2.840.113556.1.4.810
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 2b09958a-8931-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.129 Attribute createTimeStamp

This attribute specifies the date this object was created. This value is replicated.

```
cn: Create-Time-Stamp
ldapDisplayName: createTimeStamp
attributeId: 2.5.18.1
attributeSyntax: 2.5.5.11
omSyntax: 24
isSingleValued: TRUE
schemaIdGuid: 2df90d73-009f-11d2-aa4c-00c04fd7d83a
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED |
 FLAG_DOMAIN_DISALLOW_RENAME
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

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2.130 Attribute createWizardExt

The GUID of wizard extensions for creating an associated object.

```
cn: Create-Wizard-Ext
ldapDisplayName: createWizardExt
attributeId: 1.2.840.113556.1.4.812
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 2b09958b-8931-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.131 Attribute creationTime

This attribute specifies the date and time that the object was created.

```
cn: Creation-Time
ldapDisplayName: creationTime
attributeId: 1.2.840.113556.1.4.26
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: bf967946-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.132 Attribute creationWizard

This attribute specifies the wizard to activate when creating objects of this class.

```
cn: Creation-Wizard
ldapDisplayName: creationWizard
attributeId: 1.2.840.113556.1.4.498
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 4d8601ed-ac85-11d0-afe3-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.133 Attribute creator

This attribute specifies the person who created the object.

```
cn: Creator
ldapDisplayName: creator
attributeId: 1.2.840.113556.1.4.679
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 7bfdcb85-4807-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.134 Attribute cRLObject

This attribute specifies the reference to the CRL object associated with a CA.

```
cn: CRL-Object
ldapDisplayName: cRLObject
attributeId: 1.2.840.113556.1.4.689
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 963d2737-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.135 Attribute cRLPartitionedRevocationList

This attribute specifies the public key infrastructure–revocation lists.

```
cn: CRL-Partitioned-Revocation-List
ldapDisplayName: cRLPartitionedRevocationList
attributeId: 1.2.840.113556.1.4.683
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 963d2731-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
rangeUpper: 10485760
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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In Windows 2000 Server, rangeUpper is not defined.

2.136 Attribute crossCertificatePair

This attribute specifies the version 3 (v3) cross-certificate.

```
cn: Cross-Certificate-Pair
ldapDisplayName: crossCertificatePair
attributeId: 2.5.4.40
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: 167757b2-47f3-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
rangeUpper: 32768
mapiID: 32805
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

In Windows 2000 Server, rangeUpper is not defined.

2.137 Attribute currentLocation

This attribute specifies the computer location for an object that has moved.

```
cn: Current-Location
ldapDisplayName: currentLocation
attributeId: 1.2.840.113556.1.4.335
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 1f0075fc-7e40-11d0-afd6-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
rangeLower: 32
rangeUpper: 32
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.138 Attribute currentParentCA

This attribute specifies a reference to the CAs that issued the current certificates for a CA.

```
cn: Current-Parent-CA
ldapDisplayName: currentParentCA
attributeId: 1.2.840.113556.1.4.696
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 963d273f-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
```


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```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.139 Attribute currentValue

This attribute is used to store the new value of a secret object. Secret objects are specified in [MS-LSAD] section 3.1.1.4. The format of the value of this attribute is outside the scope of the state model, and values stored in this attribute cannot be retrieved via the Lightweight Directory Access Protocol (LDAP). Instead, secret objects are retrieved and written as specified in [MS-LSAD] section 3.1.1.4.

```
cn: Current-Value
ldapDisplayName: currentValue
attributeId: 1.2.840.113556.1.4.27
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: bf967947-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.140 Attribute currMachineId

This attribute specifies the ID of the machine where a Link-Track-Vol-Entry object is located.

```
cn: Curr-Machine-Id
ldapDisplayName: currMachineId
attributeId: 1.2.840.113556.1.4.337
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 1f0075fe-7e40-11d0-afd6-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
rangeLower: 16
rangeUpper: 16
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.141 Attribute dBCSPwd

This attribute specifies the account's LAN Manager password.

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For more information, see [MS-SAMR] section 3.1.1.8.6.

```
cn: DBCS-Pwd
ldapDisplayName: dBCSPwd
attributeId: 1.2.840.113556.1.4.55
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: bf96799c-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.142 Attribute dc

This attribute specifies the naming attribute for domain and DNS objects. Usually displayed as dc=DomainName.

```
cn: Domain-Component
ldapDisplayName: dc
attributeId: 0.9.2342.19200300.100.1.25
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 19195a55-6da0-11d0-afd3-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 255
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
 FLAG_ATTR_REQ_PARTIAL_SET_MEMBER
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.143 Attribute defaultClassStore

This attribute specifies the default Class Store for a given user.

```
cn: Default-Class-Store
ldapDisplayName: defaultClassStore
attributeId: 1.2.840.113556.1.4.213
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: bf967948-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
```


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```
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.144 Attribute defaultGroup

This attribute specifies the group to which this object is assigned when it is created.

```
cn: Default-Group
ldapDisplayName: defaultGroup
attributeId: 1.2.840.113556.1.4.480
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 720bc4e2-a54a-11d0-afdf-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.145 Attribute defaultHidingValue

This attribute specifies a Boolean value that specifies the default setting of the showInAdvancedViewOnly property of new instances of this class.

```
cn: Default-Hiding-Value
ldapDisplayName: defaultHidingValue
attributeId: 1.2.840.113556.1.4.518
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: b7b13116-b82e-11d0-afee-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.146 Attribute defaultLocalPolicyObject

This attribute specifies a reference to a policy object that defines the local policy for the host object.

```
cn: Default-Local-Policy-Object
ldapDisplayName: defaultLocalPolicyObject
attributeId: 1.2.840.113556.1.4.57
```


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```
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: bf96799f-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.147 Attribute defaultObjectCategory

This attribute specifies the value to use for the objectCategory attribute (see [MS-ADA3] section 2.39) if one is not specified on object instantiation. For more information on the defaultObjectCategory attribute, see [MS-ADTS] section 3.1.1.2.4.8.

```
cn: Default-Object-Category
ldapDisplayName: defaultObjectCategory
attributeId: 1.2.840.113556.1.4.783
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 26d97367-6070-11d1-a9c6-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.148 Attribute defaultPriority

The default priority (for example, of a process or a print job).

```
cn: Default-Priority
ldapDisplayName: defaultPriority
attributeId: 1.2.840.113556.1.4.232
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 281416c8-1968-11d0-a28f-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.149 Attribute defaultSecurityDescriptor

This attribute specifies the security descriptor to be assigned to the object when it is created.

```
cn: Default-Security-Descriptor
ldapDisplayName: defaultSecurityDescriptor
attributeId: 1.2.840.113556.1.4.224
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 807a6d30-1669-11d0-a064-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 32767
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.150 Attribute deltaRevocationList

This list contains certificates revoked since the last delta update.

```
cn: Delta-Revocation-List
ldapDisplayName: deltaRevocationList
attributeId: 2.5.4.53
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: 167757b5-47f3-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
rangeUpper: 10485760
mapiID: 35910
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

In Windows 2000 Server, rangeUpper is not defined.

2.151 Attribute department

This attribute contains the name of the user's department.

```
cn: Department
ldapDisplayName: department
attributeId: 1.2.840.113556.1.2.141
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf96794f-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fCOPY
rangeLower: 1
```


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```
rangeUpper: 64
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
mapiID: 14872
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.152 Attribute departmentNumber

This attribute can be used to store a department number within an organization.

```
cn: departmentNumber
ldapDisplayName: departmentNumber
attributeId: 2.16.840.1.113730.3.1.2
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: be9ef6ee-cbc7-4f22-b27b-96967e7ee585
systemOnly: FALSE
searchFlags: 0
showInAdvancedViewOnly: FALSE
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.153 Attribute description

This attribute specifies the description to display for an object.

```
cn: Description
ldapDisplayName: description
attributeId: 2.5.4.13
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: bf967950-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 1024
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
mapiID: 32879
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.154 Attribute desktopProfile

This attribute specifies the location of the desktop profile for a user or group of users.

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```
cn: Desktop-Profile
ldapDisplayName: desktopProfile
attributeId: 1.2.840.113556.1.4.346
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: eea65906-8ac6-11d0-afda-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.155 Attribute destinationIndicator

This is part of the [X500] specification.

```
cn: Destination-Indicator
ldapDisplayName: destinationIndicator
attributeId: 2.5.4.27
attributeSyntax: 2.5.5.5
omSyntax: 19
isSingleValued: FALSE
schemaIdGuid: bf967951-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 128
mapiID: 32880
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.156 Attribute dhcpClasses

```
cn: dhcp-Classes
ldapDisplayName: dhcpClasses
attributeId: 1.2.840.113556.1.4.715
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: 963d2750-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.157 Attribute dhcpFlags

```
cn: dhcp-Flags
ldapDisplayName: dhcpFlags
attributeId: 1.2.840.113556.1.4.700
```


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```
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 963d2741-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.158 Attribute dhcpIdentification

```
cn: dhcp-Identification
ldapDisplayName: dhcpIdentification
attributeId: 1.2.840.113556.1.4.701
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 963d2742-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.159 Attribute dhcpMask

```
cn: dhcp-Mask
ldapDisplayName: dhcpMask
attributeId: 1.2.840.113556.1.4.706
attributeSyntax: 2.5.5.5
omSyntax: 19
isSingleValued: FALSE
schemaIdGuid: 963d2747-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.160 Attribute dhcpMaxKey

```
cn: dhcp-MaxKey
ldapDisplayName: dhcpMaxKey
attributeId: 1.2.840.113556.1.4.719
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 963d2754-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.161 Attribute dhcpObjDescription

```
cn: dhcp-Obj-Description
ldapDisplayName: dhcpObjDescription
attributeId: 1.2.840.113556.1.4.703
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 963d2744-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.162 Attribute dhcpObjName

```
cn: dhcp-Obj-Name
ldapDisplayName: dhcpObjName
attributeId: 1.2.840.113556.1.4.702
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 963d2743-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.163 Attribute dhcpOptions

```
cn: dhcp-Options
ldapDisplayName: dhcpOptions
attributeId: 1.2.840.113556.1.4.714
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: 963d274f-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.164 Attribute dhcpProperties

```
cn: dhcp-Properties
ldapDisplayName: dhcpProperties
```


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```
attributeId: 1.2.840.113556.1.4.718
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: 963d2753-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.165 Attribute dhcpRanges

```
cn: dhcp-Ranges
ldapDisplayName: dhcpRanges
attributeId: 1.2.840.113556.1.4.707
attributeSyntax: 2.5.5.5
omSyntax: 19
isSingleValued: FALSE
schemaIdGuid: 963d2748-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.166 Attribute dhcpReservations

```
cn: dhcp-Reservations
ldapDisplayName: dhcpReservations
attributeId: 1.2.840.113556.1.4.709
attributeSyntax: 2.5.5.5
omSyntax: 19
isSingleValued: FALSE
schemaIdGuid: 963d274a-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.167 Attribute dhcpServers

This attribute contains a list of servers authorized in the enterprise. This attribute is sent by the Dynamic Host Configuration Protocol (DHCP) server and can contain either the name of the server or its IP address.

```
cn: dhcp-Servers
ldapDisplayName: dhcpServers
attributeId: 1.2.840.113556.1.4.704
attributeSyntax: 2.5.5.5
omSyntax: 19
isSingleValued: FALSE
```


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```
schemaIdGuid: 963d2745-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
extendedCharsAllowed: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

In Windows 2000 Server, extendedCharsAllowed is not defined.

2.168 Attribute dhcpSites

```
cn: dhcp-Sites
ldapDisplayName: dhcpSites
attributeId: 1.2.840.113556.1.4.708
attributeSyntax: 2.5.5.5
omSyntax: 19
isSingleValued: FALSE
schemaIdGuid: 963d2749-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.169 Attribute dhcpState

```
cn: dhcp-State
ldapDisplayName: dhcpState
attributeId: 1.2.840.113556.1.4.717
attributeSyntax: 2.5.5.5
omSyntax: 19
isSingleValued: FALSE
schemaIdGuid: 963d2752-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.170 Attribute dhcpSubnets

```
cn: dhcp-Subnets
ldapDisplayName: dhcpSubnets
attributeId: 1.2.840.113556.1.4.705
attributeSyntax: 2.5.5.5
omSyntax: 19
isSingleValued: FALSE
schemaIdGuid: 963d2746-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.171 Attribute dhcpType

The type of DHCP server. This attribute is sent by the DHCP server during authorization and is currently being set to 0.

```
cn: dhcp-Type
ldapDisplayName: dhcpType
attributeId: 1.2.840.113556.1.4.699
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 963d273b-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: fATTINDEX
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.172 Attribute dhcpUniqueKey

```
cn: dhcp-Unique-Key
ldapDisplayName: dhcpUniqueKey
attributeId: 1.2.840.113556.1.4.698
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 963d273a-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.173 Attribute dhcpUpdateTime

```
cn: dhcp-Update-Time
ldapDisplayName: dhcpUpdateTime
attributeId: 1.2.840.113556.1.4.720
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 963d2755-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.174 Attribute directReports

This attribute contains the list of users who directly report to a user. The users listed as reports are those who have their property-manager property set to this user. Each item in the list is a linked reference to the object that represents the corresponding user.

```
cn: Reports
ldapDisplayName: directReports
attributeId: 1.2.840.113556.1.2.436
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: bf967a1c-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: 0
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
linkID: 43
mapiID: 32782
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.175 Attribute displayName

This attribute specifies the display name for an object, usually the combination of the user's first name, middle initial, and last name.

```
cn: Display-Name
ldapDisplayName: displayName
attributeId: 1.2.840.113556.1.2.13
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf967953-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fANR | fATTINDEX
rangeLower: 0
rangeUpper: 256
attributeSecurityGuid: 59ba2f42-79a2-11d0-9020-00c04fc2d3cf
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.176 Attribute displayNamePrintable

This attribute specifies the printable display name for an object, usually the combination of the user's first name, middle initial, and last name.

```
cn: Display-Name-Printable
ldapDisplayName: displayNamePrintable
attributeId: 1.2.840.113556.1.2.353
```


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```
attributeSyntax: 2.5.5.5
omSyntax: 19
isSingleValued: TRUE
schemaIdGuid: bf967954-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 256
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
mapiID: 14847
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.177 Attribute distinguishedName

This attribute is the same as the distinguished name for an object and is included on all objects in Active Directory. It is also used by Exchange Server. See [MS-ADTS] section 3.1.1.1.4 for more information.

```
cn: Obj-Dist-Name
ldapDisplayName: distinguishedName
attributeId: 2.5.4.49
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: bf9679e4-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: fPRESERVEONDELETE
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
mapiID: 32828
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
 FLAG ATTR REQ PARTIAL SET MEMBER | FLAG ATTR NOT REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.178 Attribute dITContentRules

This attribute specifies the permissible content of entries of a particular structural object class via the identification of an optional set of auxiliary object classes, as well as mandatory, optional, and precluded attributes. Collective attributes shall be included in DIT-Content-Rules, as specified in [RFC2251] section 3.2.1.

```
cn: DIT-Content-Rules
ldapDisplayName: dITContentRules
attributeId: 2.5.21.2
attributeSyntax: 2.5.5.12
omSyntax: 64
```


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```
isSingleValued: FALSE
schemaIdGuid: 9a7ad946-ca53-11d1-bbd0-0080c76670c0
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED |
 FLAG DOMAIN DISALLOW RENAME
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.179 Attribute division

This attribute can be used to store the name of a division for a user.

```
cn: Division
ldapDisplayName: division
attributeId: 1.2.840.113556.1.4.261
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: fe6136a0-2073-11d0-a9c2-00aa006c33ed
systemOnly: FALSE
searchFlags: fCOPY
rangeLower: 0
rangeUpper: 256
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.180 Attribute dMDLocation

This attribute specifies the distinguished name to the schema partition.

```
cn: DMD-Location
ldapDisplayName: dMDLocation
attributeId: 1.2.840.113556.1.2.36
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: f0f8ff8b-1191-11d0-a060-00aa006c33ed
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

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2.181 Attribute dmdName

This attribute specifies a name used to identify the schema partition.

```
cn: DMD-Name
ldapDisplayName: dmdName
attributeId: 1.2.840.113556.1.2.598
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 167757b9-47f3-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 1024
mapiID: 35926
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.182 Attribute dNReferenceUpdate

If an object is renamed, this attribute is used to track all the previous and current names assigned to the object so that linked objects can still find it.

```
cn: DN-Reference-Update
ldapDisplayName: dNReferenceUpdate
attributeId: 1.2.840.113556.1.4.1242
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 2df90d86-009f-11d2-aa4c-00c04fd7d83a
systemOnly: TRUE
searchFlags: fPRESERVEONDELETE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.183 Attribute dnsAllowDynamic

```
cn: Dns-Allow-Dynamic
ldapDisplayName: dnsAllowDynamic
attributeId: 1.2.840.113556.1.4.378
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: e0fa1e65-9b45-11d0-afdd-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.184 Attribute dnsAllowXFR

```
cn: Dns-Allow-XFR
ldapDisplayName: dnsAllowXFR
attributeId: 1.2.840.113556.1.4.379
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: e0fa1e66-9b45-11d0-afdd-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.185 Attribute dNSHostName

This attribute specifies the name of a computer as registered in DNS.

```
cn: DNS-Host-Name
ldapDisplayName: dNSHostName
attributeId: 1.2.840.113556.1.4.619
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 72e39547-7b18-11d1-adef-00c04fd8d5cd
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 2048
attributeSecurityGuid: 72e39547-7b18-11d1-adef-00c04fd8d5cd
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

In Windows 2000 Server, attributeSecurityGuid is not defined.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.186 Attribute dnsNotifySecondaries

```
cn: Dns-Notify-Secondaries
ldapDisplayName: dnsNotifySecondaries
attributeId: 1.2.840.113556.1.4.381
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: FALSE
schemaIdGuid: e0fa1e68-9b45-11d0-afdd-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
```


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```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.187 Attribute dNSProperty

Written onto dnsZone objects. This attribute is used to store zone properties in BLOB format.

```
cn: DNS-Property
ldapDisplayName: dNSProperty
attributeId: 1.2.840.113556.1.4.1306
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: 675a15fe-3b70-11d2-90cc-00c04fd91ab1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.188 Attribute dnsRecord

This attribute is written onto dnsNode objects. Used to store DNS resource record definitions in BLOB format.

```
cn: Dns-Record
ldapDisplayName: dnsRecord
attributeId: 1.2.840.113556.1.4.382
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: e0fa1e69-9b45-11d0-afdd-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.189 Attribute dnsRoot

The uppermost fully qualified domain name (FQDN) (1) ([MS-ADTS] section 1.1) assigned to a domain naming context. This is set on a crossRef object and is used, among other things, for referral generation. A search through an entire domain tree is initiated at the Dns-Root object. This attribute can be multivalued, in which case multiple referrals are generated.

```
cn: Dns-Root
ldapDisplayName: dnsRoot
attributeId: 1.2.840.113556.1.4.28
attributeSyntax: 2.5.5.12
omSyntax: 64
```


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```
isSingleValued: FALSE
schemaIdGuid: bf967959-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fATTINDEX
rangeLower: 1
rangeUpper: 255
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.190 Attribute dnsSecureSecondaries

```
cn: Dns-Secure-Secondaries
ldapDisplayName: dnsSecureSecondaries
attributeId: 1.2.840.113556.1.4.380
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: FALSE
schemaIdGuid: e0fa1e67-9b45-11d0-afdd-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.191 Attribute dNSTombstoned

Set to TRUE if this object has been tombstoned. This attribute exists to make searching for tombstoned records easier and faster.

Tombstoned objects are objects that have been deleted but not yet removed from the directory. When the value is missing or FALSE, the DNS node is active. When the value is TRUE, the DNS node has been logically deleted, but the dnsNode object is kept alive to avoid excess replication traffic and to replicate node deletions between DNS servers.

```
cn: DNS-Tombstoned
ldapDisplayName: dNSTombstoned
attributeId: 1.2.840.113556.1.4.1414
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: d5eb2eb7-be4e-463b-a214-634a44d7392e
systemOnly: FALSE
searchFlags: fATTINDEX
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.192 Attribute documentAuthor

```
cn: documentAuthor
ldapDisplayName: documentAuthor
attributeId: 0.9.2342.19200300.100.1.14
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: f18a8e19-af5f-4478-b096-6f35c27eb83f
systemOnly: FALSE
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.193 Attribute documentIdentifier

```
cn: documentIdentifier
ldapDisplayName: documentIdentifier
attributeId: 0.9.2342.19200300.100.1.11
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 0b21ce82-ff63-46d9-90fb-c8b9f24e97b9
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 256
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.194 Attribute documentLocation

```
cn: documentLocation
ldapDisplayName: documentLocation
attributeId: 0.9.2342.19200300.100.1.15
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: b958b14e-ac6d-4ec4-8892-be70b69f7281
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 256
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.195 Attribute documentPublisher

This attribute specifies the person and/or organization that published a document.

```
cn: documentPublisher
ldapDisplayName: documentPublisher
```


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```
attributeId: 0.9.2342.19200300.100.1.56
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 170f09d7-eb69-448a-9a30-f1afecfd32d7
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 256
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.196 Attribute documentTitle

```
cn: documentTitle
ldapDisplayName: documentTitle
attributeId: 0.9.2342.19200300.100.1.12
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: de265a9c-ff2c-47b9-91dc-6e6fe2c43062
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 256
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.197 Attribute documentVersion

```
cn: documentVersion
ldapDisplayName: documentVersion
attributeId: 0.9.2342.19200300.100.1.13
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 94b3a8a9-d613-4cec-9aad-5fbcc1046b43
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 256
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.198 Attribute domainCAs

The Domain-Certificate-Authorities attribute contains a list of certificate authorities for a given domain.

```
cn: Domain-Certificate-Authorities
ldapDisplayName: domainCAs
attributeId: 1.2.840.113556.1.4.668
attributeSyntax: 2.5.5.1
```


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```
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 7bfdcb7a-4807-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.199 Attribute domainCrossRef

This is a reference from a trusted domain object to the cross-reference object of the trusted domain.

```
cn: Domain-Cross-Ref
ldapDisplayName: domainCrossRef
attributeId: 1.2.840.113556.1.4.472
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: b000ea7b-a086-11d0-afdd-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.200 Attribute domainID

Reference to a domain associated with a CA.

```
cn: Domain-ID
ldapDisplayName: domainID
attributeId: 1.2.840.113556.1.4.686
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 963d2734-48be-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.201 Attribute domainIdentifier

The domain security identifier (SID), as defined in [MS-DTYP] section 2.4.2, identifying the domain. The SID can be represented in any of the three formats described in that section, depending on the type of protocol being used to carry the information.

```
cn: Domain-Identifier
ldapDisplayName: domainIdentifier
attributeId: 1.2.840.113556.1.4.755
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 7f561278-5301-11d1-a9c5-0000f80367c1
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.202 Attribute domainPolicyObject

Reference to the policy object defining the Local Security Authority (LSA) policy for the host domain.

```
cn: Domain-Policy-Object
ldapDisplayName: domainPolicyObject
attributeId: 1.2.840.113556.1.4.32
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: bf96795d-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.203 Attribute domainPolicyReference

The distinguished name of a domain policy object that a policy object copies from.

```
cn: Domain-Policy-Reference
ldapDisplayName: domainPolicyReference
attributeId: 1.2.840.113556.1.4.422
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 80a67e2a-9f22-11d0-afdd-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: a29b89fe-c7e8-11d0-9bae-00c04fd92ef5
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.204 Attribute domainReplica

A Unicode string attribute that gives the NetBIOS name of the PDC at the time of upgrade from Windows NT 4.0, otherwise the default value is NULL.

```
cn: Domain-Replica
ldapDisplayName: domainReplica
attributeId: 1.2.840.113556.1.4.158
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf96795e-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 32767
attributeSecurityGuid: b8119fd0-04f6-4762-ab7a-4986c76b3f9a
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

In Windows 2000 Server, attributeSecurityGuid is not defined.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.205 Attribute domainWidePolicy

This attribute is for user-extensible policy to be replicated to the clients.

```
cn: Domain-Wide-Policy
ldapDisplayName: domainWidePolicy
attributeId: 1.2.840.113556.1.4.421
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: 80a67e29-9f22-11d0-afdd-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: a29b89fd-c7e8-11d0-9bae-00c04fd92ef5
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.206 Attribute drink

```
cn: drink
ldapDisplayName: drink
attributeId: 0.9.2342.19200300.100.1.5
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
```


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```
schemaIdGuid: 1a1aa5b5-262e-4df6-af04-2cf6b0d80048
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 256
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.207 Attribute driverName

```
cn: Driver-Name
ldapDisplayName: driverName
attributeId: 1.2.840.113556.1.4.229
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 281416c5-1968-11d0-a28f-00aa003049e2
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.208 Attribute driverVersion

```
cn: Driver-Version
ldapDisplayName: driverVersion
attributeId: 1.2.840.113556.1.4.276
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: ba305f6e-47e3-11d0-a1a6-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.209 Attribute dSASignature

The DSA-Signature of an object is the Invocation-ID of the last directory to modify the object.

```
cn: DSA-Signature
ldapDisplayName: dSASignature
attributeId: 1.2.840.113556.1.2.74
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 167757bc-47f3-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
mapiID: 32887
```


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```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.210 Attribute dSCorePropagationData

This attribute is for internal use only.

```
cn: DS-Core-Propagation-Data
ldapDisplayName: dSCorePropagationData
attributeId: 1.2.840.113556.1.4.1357
attributeSyntax: 2.5.5.11
omSyntax: 24
isSingleValued: FALSE
schemaIdGuid: d167aa4b-8b08-11d2-9939-0000f87a57d4
systemOnly: TRUE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG SCHEMA BASE OBJECT |
 FLAG_ATTR_REQ_PARTIAL_SET_MEMBER | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.211 Attribute dSHeuristics

This attribute contains global settings for the entire forest. For more information on global settings, see [MS-ADTS].

```
cn: DS-Heuristics
ldapDisplayName: dSHeuristics
attributeId: 1.2.840.113556.1.2.212
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: f0f8ff86-1191-11d0-a060-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

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2.212 Attribute dSUIAdminMaximum

This is the default maximum number of objects that will be shown in a container by the administration user interface (UI).

```
cn: DS-UI-Admin-Maximum
ldapDisplayName: dSUIAdminMaximum
attributeId: 1.2.840.113556.1.4.1344
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: ee8d0ae0-6f91-11d2-9905-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.213 Attribute dSUIAdminNotification

This attribute specifies a list of the GUIDs of COM objects that support a callback interface that DSAdmin calls when an action has occurred on an object through the UI.

```
cn: DS-UI-Admin-Notification
ldapDisplayName: dSUIAdminNotification
attributeId: 1.2.840.113556.1.4.1343
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: f6ea0a94-6f91-11d2-9905-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.214 Attribute dSUIShellMaximum

This attribute specifies the default maximum number of objects that will be shown in a container by the shell UI.

```
cn: DS-UI-Shell-Maximum
ldapDisplayName: dSUIShellMaximum
attributeId: 1.2.840.113556.1.4.1345
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: fcca766a-6f91-11d2-9905-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.215 Attribute dynamicLDAPServer

This attribute specifies the fully qualified domain name (FQDN) (1) ([MS-ADTS] section 1.1) of the server-handling dynamic properties for this account.

```
cn: Dynamic-LDAP-Server
ldapDisplayName: dynamicLDAPServer
attributeId: 1.2.840.113556.1.4.537
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 52458021-ca6a-11d0-afff-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.216 Attribute eFSPolicy

The Encrypting File System (EFS) Policy.

```
cn: EFSPolicy
ldapDisplayName: eFSPolicy
attributeId: 1.2.840.113556.1.4.268
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: 8e4eb2ec-4712-11d0-a1a0-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: a29b89fd-c7e8-11d0-9bae-00c04fd92ef5
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.217 Attribute employeeID

This attribute specifies the ID of an employee.

```
cn: Employee-ID
ldapDisplayName: employeeID
attributeId: 1.2.840.113556.1.4.35
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf967962-0de6-11d0-a285-00aa003049e2
```


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```
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 16
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.218 Attribute employeeNumber

This attribute specifies the number assigned to an employee other than the ID.

```
cn: Employee-Number
ldapDisplayName: employeeNumber
attributeId: 1.2.840.113556.1.2.610
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: a8df73ef-c5ea-11d1-bbcb-0080c76670c0
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 512
mapiID: 35943
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

In Windows 2000 Server, the following attributes are defined differently.

```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

2.219 Attribute employeeType

This attribute specifies the job category for an employee.

```
cn: Employee-Type
ldapDisplayName: employeeType
attributeId: 1.2.840.113556.1.2.613
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: a8df73f0-c5ea-11d1-bbcb-0080c76670c0
systemOnly: FALSE
searchFlags: fCOPY
rangeLower: 1
rangeUpper: 256
mapiID: 35945
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

In Windows 2000 Server, the following attributes are defined differently.

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```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

2.220 Attribute Enabled

This attribute is used to signify whether a given crossRef is enabled.

```
cn: Enabled
ldapDisplayName: Enabled
attributeId: 1.2.840.113556.1.2.557
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: a8df73f2-c5ea-11d1-bbcb-0080c76670c0
systemOnly: FALSE
searchFlags: 0
mapiID: 35873
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.221 Attribute enabledConnection

This attribute specifies whether a connection is available for use.

```
cn: Enabled-Connection
ldapDisplayName: enabledConnection
attributeId: 1.2.840.113556.1.4.36
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: bf967963-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.222 Attribute enrollmentProviders

Public key infrastructure (PKI) certificate templates.

```
cn: Enrollment-Providers
ldapDisplayName: enrollmentProviders
attributeId: 1.2.840.113556.1.4.825
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 2a39c5b3-8960-11d1-aebc-0000f80367c1
```


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```
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.223 Attribute entryTTL

This operational attribute is maintained by the server and appears to be present in every dynamic entry. The attribute is not present when the entry does not contain the dynamicObject object class. The value of this attribute is the time in seconds that the entry will continue to exist before disappearing from the directory.

In the absence of intervening "refresh" operations, the values returned by reading the attribute in two successive searches are guaranteed to be nonincreasing. The smallest permissible value is 0, indicating that the entry can disappear without warning. The attribute is marked NO-USER-MODIFICATION because it can be changed only by using the refresh operation.

```
cn: Entry-TTL
ldapDisplayName: entryTTL
attributeId: 1.3.6.1.4.1.1466.101.119.3
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: d213decc-d81a-4384-aac2-dcfcfd631cf8
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 31557600
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.224 Attribute extendedAttributeInfo

This attribute specifies a multivalued property containing strings that represent additional information for each attribute.

```
cn: Extended-Attribute-Info
ldapDisplayName: extendedAttributeInfo
attributeId: 1.2.840.113556.1.4.909
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 9a7ad947-ca53-11d1-bbd0-0080c76670c0
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED |
 FLAG_DOMAIN_DISALLOW_RENAME
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.225 Attribute extendedCharsAllowed

This attribute specifies whether extended characters are allowed in the value of this attribute. Applies only to IA5, numeric, printable, and teletex string attributes.

```
cn: Extended-Chars-Allowed
ldapDisplayName: extendedCharsAllowed
attributeId: 1.2.840.113556.1.2.380
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: bf967966-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
mapiID: 32935
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

In Windows 2000 Server, the following attributes are defined differently.

```
systemOnly: TRUE
```

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.226 Attribute extendedClassInfo

This attribute specifies a multivalued property containing strings that represent additional information for each class. Each value contains the governsID, lDAPDisplayName, and schemaIDGUID of the class.

```
cn: Extended-Class-Info
ldapDisplayName: extendedClassInfo
attributeId: 1.2.840.113556.1.4.908
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 9a7ad948-ca53-11d1-bbd0-0080c76670c0
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG SCHEMA BASE OBJECT | FLAG ATTR IS CONSTRUCTED |
 FLAG_DOMAIN_DISALLOW_RENAME
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.227 Attribute extensionName

This attribute specifies the name of a property page used to extend the UI of a directory object.

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```
cn: Extension-Name
ldapDisplayName: extensionName
attributeId: 1.2.840.113556.1.2.227
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: bf967972-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 255
mapiID: 32937
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.228 Attribute extraColumns

This is a multivalued attribute whose value(s) consist of a 5 tuple: (attribute name), (column title), (default visibility (0,1)), (column width (-1 for auto width)), and 0 (reserved for future use). This value is used by the Active Directory Users and Computers console.

```
cn: Extra-Columns
ldapDisplayName: extraColumns
attributeId: 1.2.840.113556.1.4.1687
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: d24e2846-1dd9-4bcf-99d7-a6227cc86da7
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.229 Attribute facsimileTelephoneNumber

Contains the telephone number of the user's business fax machine.

```
cn: Facsimile-Telephone-Number
ldapDisplayName: facsimileTelephoneNumber
attributeId: 2.5.4.23
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf967974-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 64
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
mapiID: 14883
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.230 Attribute fileExtPriority

This attribute specifies a list of file extensions in an application package and their associated priorities.

```
cn: File-Ext-Priority
ldapDisplayName: fileExtPriority
attributeId: 1.2.840.113556.1.4.816
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: d9e18315-8939-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: fATTINDEX
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.231 Attribute flags

To be used by the object to store bit information.

```
cn: Flags
ldapDisplayName: flags
attributeId: 1.2.840.113556.1.4.38
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf967976-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.232 Attribute flatName

For Windows NT domains, the flat name is the NetBIOS name. For links with non–Windows NT domains, the flat name is the identifying name of that domain or it is NULL.

```
cn: Flat-Name
ldapDisplayName: flatName
attributeId: 1.2.840.113556.1.4.511
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: b7b13117-b82e-11d0-afee-0000f80367c1
systemOnly: FALSE
searchFlags: fATTINDEX
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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```
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.233 Attribute forceLogoff

This attribute is used in computing the kickoff time. Logoff time minus Force Log Off equals kickoff time.

```
cn: Force-Logoff
ldapDisplayName: forceLogoff
attributeId: 1.2.840.113556.1.4.39
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: bf967977-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: b8119fd0-04f6-4762-ab7a-4986c76b3f9a
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

In Windows 2000 Server, attributeSecurityGuid is not defined.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.234 Attribute foreignIdentifier

This attribute specifies the security properties used by a foreign system.

```
cn: Foreign-Identifier
ldapDisplayName: foreignIdentifier
attributeId: 1.2.840.113556.1.4.356
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 3e97891e-8c01-11d0-afda-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.235 Attribute friendlyNames

This attribute specifies a list of default friendly name definitions supported by a catalog.

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```
cn: Friendly-Names
ldapDisplayName: friendlyNames
attributeId: 1.2.840.113556.1.4.682
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 7bfdcb88-4807-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.236 Attribute fromEntry

This is a constructed attribute that is TRUE if the object is writable, and FALSE if it is read-only (for example, a global catalog replica instance).

```
cn: From-Entry
ldapDisplayName: fromEntry
attributeId: 1.2.840.113556.1.4.910
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: FALSE
schemaIdGuid: 9a7ad949-ca53-11d1-bbd0-0080c76670c0
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_IS_CONSTRUCTED |
 FLAG_DOMAIN_DISALLOW_RENAME
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.237 Attribute fromServer

This attribute specifies the distinguished name of the replication source server.

```
cn: From-Server
ldapDisplayName: fromServer
attributeId: 1.2.840.113556.1.4.40
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: bf967979-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fATTINDEX
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.238 Attribute frsComputerReference

This File Replication service (FRS) attribute contains a reference to a replica set member's computer object.

```
cn: Frs-Computer-Reference
ldapDisplayName: frsComputerReference
attributeId: 1.2.840.113556.1.4.869
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 2a132578-9373-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
linkID: 102
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG SCHEMA BASE OBJECT |
 FLAG_ATTR_REQ_PARTIAL_SET_MEMBER
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.239 Attribute frsComputerReferenceBL

This FRS attribute is a back link attribute of Attribute frsComputerReference and contains a reference to replica sets to which this computer belongs.

```
cn: Frs-Computer-Reference-BL
ldapDisplayName: frsComputerReferenceBL
attributeId: 1.2.840.113556.1.4.870
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 2a132579-9373-11d1-aebc-0000f80367c1
systemOnly: TRUE
searchFlags: 0
linkID: 103
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.240 Attribute fRSControlDataCreation

This FRS attribute contains a Warning/Error level pair for file data creation (megabyte (MB) per second).

```
cn: FRS-Control-Data-Creation
ldapDisplayName: fRSControlDataCreation
attributeId: 1.2.840.113556.1.4.871
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
```


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```
schemaIdGuid: 2a13257a-9373-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 32
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.241 Attribute fRSControlInboundBacklog

This FRS attribute contains a Warning/Error level pair for inbound backlog (number of files).

```
cn: FRS-Control-Inbound-Backlog
ldapDisplayName: fRSControlInboundBacklog
attributeId: 1.2.840.113556.1.4.872
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 2a13257b-9373-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 32
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.242 Attribute fRSControlOutboundBacklog

This FRS attribute contains a Warning/Error level pair for outbound backlog (number of files).

```
cn: FRS-Control-Outbound-Backlog
ldapDisplayName: fRSControlOutboundBacklog
attributeId: 1.2.840.113556.1.4.873
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 2a13257c-9373-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 32
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.243 Attribute fRSDirectoryFilter

This FRS attribute contains a list of directories excluded from file replication (for example, the "temp" directory or the "obj" directory).

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```
cn: FRS-Directory-Filter
ldapDisplayName: fRSDirectoryFilter
attributeId: 1.2.840.113556.1.4.484
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 1be8f171-a9ff-11d0-afe2-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 2048
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.244 Attribute fRSDSPoll

This FRS attribute contains the DS polling interval for the file replication engine.

```
cn: FRS-DS-Poll
ldapDisplayName: fRSDSPoll
attributeId: 1.2.840.113556.1.4.490
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 1be8f177-a9ff-11d0-afe2-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.245 Attribute fRSExtensions

This FRS attribute contains binary data used by file replication.

```
cn: FRS-Extensions
ldapDisplayName: fRSExtensions
attributeId: 1.2.840.113556.1.4.536
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 52458020-ca6a-11d0-afff-0000f80367c1
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 65536
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.246 Attribute fRSFaultCondition

This FRS attribute contains the fault condition for a member.

```
cn: FRS-Fault-Condition
ldapDisplayName: fRSFaultCondition
attributeId: 1.2.840.113556.1.4.491
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 1be8f178-a9ff-11d0-afe2-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 16
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.247 Attribute fRSFileFilter

This FRS attribute contains the list of file extensions excluded from file replication.

```
cn: FRS-File-Filter
ldapDisplayName: fRSFileFilter
attributeId: 1.2.840.113556.1.4.483
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 1be8f170-a9ff-11d0-afe2-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 2048
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.248 Attribute fRSFlags

This FRS attribute contains the FRS option flags.

```
cn: FRS-Flags
ldapDisplayName: fRSFlags
attributeId: 1.2.840.113556.1.4.874
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 2a13257d-9373-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.249 Attribute fRSLevelLimit

This FRS attribute contains the limit depth of the directory tree to replicate for file replication.

```
cn: FRS-Level-Limit
ldapDisplayName: fRSLevelLimit
attributeId: 1.2.840.113556.1.4.534
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 5245801e-ca6a-11d0-afff-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.250 Attribute fRSMemberReference

This FRS attribute contains a reference to the member object for this subscriber.

```
cn: FRS-Member-Reference
ldapDisplayName: fRSMemberReference
attributeId: 1.2.840.113556.1.4.875
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 2a13257e-9373-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
linkID: 104
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
 FLAG_ATTR_REQ_PARTIAL_SET_MEMBER
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.251 Attribute fRSMemberReferenceBL

This FRS attribute is the back link attribute of Attribute fRSMemberReference and contains a reference to subscriber objects for this member.

```
cn: FRS-Member-Reference-BL
ldapDisplayName: fRSMemberReferenceBL
attributeId: 1.2.840.113556.1.4.876
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 2a13257f-9373-11d1-aebc-0000f80367c1
```


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```
systemOnly: TRUE
searchFlags: 0
linkID: 105
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.252 Attribute fRSPartnerAuthLevel

This FRS attribute contains the remote procedure call (RPC) security level.

```
cn: FRS-Partner-Auth-Level
ldapDisplayName: fRSPartnerAuthLevel
attributeId: 1.2.840.113556.1.4.877
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 2a132580-9373-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.253 Attribute fRSPrimaryMember

This FRS attribute contains a reference to the primary member of a replica set.

```
cn: FRS-Primary-Member
ldapDisplayName: fRSPrimaryMember
attributeId: 1.2.840.113556.1.4.878
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 2a132581-9373-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
linkID: 106
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.254 Attribute fRSReplicaSetGUID

This FRS attribute contains a GUID that identifies an FRS replica set.

```
cn: FRS-Replica-Set-GUID
ldapDisplayName: fRSReplicaSetGUID
attributeId: 1.2.840.113556.1.4.533
attributeSyntax: 2.5.5.10
```


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```
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 5245801a-ca6a-11d0-afff-0000f80367c1
systemOnly: FALSE
searchFlags: 0
rangeLower: 16
rangeUpper: 16
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.255 Attribute fRSReplicaSetType

This FRS attribute contains a code that indicates whether this is a system volume (SYSVOL) replica set, a distributed file system (DFS) replica set, or other replica set.

```
cn: FRS-Replica-Set-Type
ldapDisplayName: fRSReplicaSetType
attributeId: 1.2.840.113556.1.4.31
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 26d9736b-6070-11d1-a9c6-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.256 Attribute fRSRootPath

This FRS attribute contains a path to the root of the replicated file system tree.

```
cn: FRS-Root-Path
ldapDisplayName: fRSRootPath
attributeId: 1.2.840.113556.1.4.487
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 1be8f174-a9ff-11d0-afe2-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 2048
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.257 Attribute fRSRootSecurity

This FRS attribute contains a security descriptor of the replica set root for file replication.

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```
cn: FRS-Root-Security
ldapDisplayName: fRSRootSecurity
attributeId: 1.2.840.113556.1.4.535
attributeSyntax: 2.5.5.15
omSyntax: 66
isSingleValued: TRUE
schemaIdGuid: 5245801f-ca6a-11d0-afff-0000f80367c1
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 65535
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.258 Attribute fRSServiceCommand

This FRS attribute contains a Unicode string that an administrator can set to pass a command to every replica set member.

```
cn: FRS-Service-Command
ldapDisplayName: fRSServiceCommand
attributeId: 1.2.840.113556.1.4.500
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: ddac0cee-af8f-11d0-afeb-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 512
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.259 Attribute fRSServiceCommandStatus

This FRS attribute contains the response from the last command issued to a member.

```
cn: FRS-Service-Command-Status
ldapDisplayName: fRSServiceCommandStatus
attributeId: 1.2.840.113556.1.4.879
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 2a132582-9373-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 512
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.260 Attribute fRSStagingPath

This FRS attribute contains a path to the file replication staging area.

```
cn: FRS-Staging-Path
ldapDisplayName: fRSStagingPath
attributeId: 1.2.840.113556.1.4.488
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 1be8f175-a9ff-11d0-afe2-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 2048
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.261 Attribute fRSTimeLastCommand

This FRS attribute contains the time in which the last command was executed.

```
cn: FRS-Time-Last-Command
ldapDisplayName: fRSTimeLastCommand
attributeId: 1.2.840.113556.1.4.880
attributeSyntax: 2.5.5.11
omSyntax: 23
isSingleValued: TRUE
schemaIdGuid: 2a132583-9373-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.262 Attribute fRSTimeLastConfigChange

This FRS attribute contains the time in which the last configuration change was accepted.

```
cn: FRS-Time-Last-Config-Change
ldapDisplayName: fRSTimeLastConfigChange
attributeId: 1.2.840.113556.1.4.881
attributeSyntax: 2.5.5.11
omSyntax: 23
isSingleValued: TRUE
schemaIdGuid: 2a132584-9373-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.263 Attribute fRSUpdateTimeout

This FRS attribute contains the maximum time, in minutes, to wait to complete an update before giving up.

```
cn: FRS-Update-Timeout
ldapDisplayName: fRSUpdateTimeout
attributeId: 1.2.840.113556.1.4.485
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 1be8f172-a9ff-11d0-afe2-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.264 Attribute fRSVersion

This FRS attribute contains the version number and build date.

```
cn: FRS-Version
ldapDisplayName: fRSVersion
attributeId: 1.2.840.113556.1.4.882
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 2a132585-9373-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 32
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.265 Attribute fRSVersionGUID

If this FRS attribute is present, changing its value indicates that a configuration change has been made on this replica set.

```
cn: FRS-Version-GUID
ldapDisplayName: fRSVersionGUID
attributeId: 1.2.840.113556.1.4.43
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 26d9736c-6070-11d1-a9c6-0000f80367c1
systemOnly: FALSE
searchFlags: 0
rangeLower: 16
rangeUpper: 16
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.266 Attribute fRSWorkingPath

This FRS attribute contains the path to the file replication database.

```
cn: FRS-Working-Path
ldapDisplayName: fRSWorkingPath
attributeId: 1.2.840.113556.1.4.486
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 1be8f173-a9ff-11d0-afe2-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 2048
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.267 Attribute fSMORoleOwner

The fSMORoleOwner attribute stores the distinguished name of a DSA object as described in [MS-ADTS] section 3.1.1.1.11 (FSMO Roles).

```
cn: FSMO-Role-Owner
ldapDisplayName: fSMORoleOwner
attributeId: 1.2.840.113556.1.4.369
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 66171887-8f3c-11d0-afda-00c04fd930c9
systemOnly: FALSE
searchFlags: fATTINDEX
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.268 Attribute garbageCollPeriod

This attribute is located on the CN=Directory Service,CN=Windows NT,CN=Services,CN=Configuration,... object. It represents the period, in hours, between DS garbage collection runs.

```
cn: Garbage-Coll-Period
ldapDisplayName: garbageCollPeriod
attributeId: 1.2.840.113556.1.2.301
```


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```
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 5fd424a1-1262-11d0-a060-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
mapiID: 32943
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.269 Attribute gecos

The **GECOS** field (the common name, as specified in [RFC2307] section 3).

```
cn: Gecos
ldapDisplayName: gecos
attributeId: 1.3.6.1.1.1.1.2
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: TRUE
schemaIdGuid: a3e03f1f-1d55-4253-a0af-30c2a784e46e
systemOnly: FALSE
searchFlags: 0
rangeUpper: 10240
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.270 Attribute generatedConnection

Set to TRUE if this connection was created by autotopology generation.

```
cn: Generated-Connection
ldapDisplayName: generatedConnection
attributeId: 1.2.840.113556.1.4.41
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: bf96797a-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.271 Attribute generationQualifier

Indicates a person's generation; for example, junior (Jr.) or II.

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```
cn: Generation-Qualifier
ldapDisplayName: generationQualifier
attributeId: 2.5.4.44
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 16775804-47f3-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 64
mapiID: 35923
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.272 Attribute gidNumber

An integer uniquely identifying a group in an administrative domain, as specified in [RFC2307].

```
cn: GidNumber
ldapDisplayName: gidNumber
attributeId: 1.3.6.1.1.1.1.1
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: c5b95f0c-ec9e-41c4-849c-b46597ed6696
systemOnly: FALSE
searchFlags: fATTINDEX
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.273 Attribute givenName

Contains the given name (first name) of the user.

```
cn: Given-Name
ldapDisplayName: givenName
attributeId: 2.5.4.42
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: f0f8ff8e-1191-11d0-a060-00aa006c33ed
systemOnly: FALSE
searchFlags: fANR | fATTINDEX
rangeLower: 1
rangeUpper: 64
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
mapiID: 14854
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.274 Attribute globalAddressList

This attribute is used on an Exchange Server container to store the distinguished name of a newly created global address list (GAL). Once this attribute has at least one entry, the implementer can enable MAPI clients to use a GAL.

```
cn: Global-Address-List
ldapDisplayName: globalAddressList
attributeId: 1.2.840.113556.1.4.1245
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: f754c748-06f4-11d2-aa53-00c04fd7d83a
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.275 Attribute globalAddressList2

This attribute is used on an Exchange Server container to store the distinguished name of a newly created GAL. Once this attribute has at least one entry, the implementer can enable MAPI clients to use a GAL. Similar to globalAddressList, it differs by being a linked attribute.

```
cn: Global-Address-List2
ldapDisplayName: globalAddressList2
attributeId: 1.2.840.113556.1.4.2047
attributeSyntax: 2.5.5.1
linkID: 2124
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 4898f63d-4112-477c-8826-3ca00bd8277d
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.276 Attribute governsID

This attribute specifies the unique object ID of the class defined by this class-schema object.

```
cn: Governs-ID
ldapDisplayName: governsID
attributeId: 1.2.840.113556.1.2.22
attributeSyntax: 2.5.5.2
omSyntax: 6
```


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```
isSingleValued: TRUE
schemaIdGuid: bf96797d-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: fPRESERVEONDELETE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.277 Attribute gPCFileSysPath

This attribute specifies the Universal Naming Convention (UNC) path to the Group Policy Object template located in the system volume (SYSVOL).

```
cn: GPC-File-Sys-Path
ldapDisplayName: gPCFileSysPath
attributeId: 1.2.840.113556.1.4.894
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: f30e3bc1-9ff0-11d1-b603-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.278 Attribute gPCFunctionalityVersion

This attribute specifies the version of the Group Policy Object Editor that created this object.

```
cn: GPC-Functionality-Version
ldapDisplayName: gPCFunctionalityVersion
attributeId: 1.2.840.113556.1.4.893
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: f30e3bc0-9ff0-11d1-b603-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.279 Attribute gPCMachineExtensionNames

This attribute is used by the Group Policy Object (GPO) for machine policies.

```
cn: GPC-Machine-Extension-Names
```


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```
ldapDisplayName: gPCMachineExtensionNames
attributeId: 1.2.840.113556.1.4.1348
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 32ff8ecc-783f-11d2-9916-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.280 Attribute gPCUserExtensionNames

This attribute is used by the GPO for user policies.

```
cn: GPC-User-Extension-Names
ldapDisplayName: gPCUserExtensionNames
attributeId: 1.2.840.113556.1.4.1349
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 42a75fc6-783f-11d2-9916-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.281 Attribute gPCWQLFilter

This attribute is used to store a string that contains a GUID for the filter and a Windows Management Instrumentation (WMI) namespace path.

```
cn: GPC-WQL-Filter
ldapDisplayName: gPCWQLFilter
attributeId: 1.2.840.113556.1.4.1694
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 7bd4c7a6-1add-4436-8c04-3999a880154c
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.282 Attribute gPLink

This attribute specifies a value used by the Group Policy Core Protocol. See [MS-GPOL] section 2.2.2.

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```
cn: GP-Link
ldapDisplayName: gPLink
attributeId: 1.2.840.113556.1.4.891
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: f30e3bbe-9ff0-11d1-b603-0000f80367c1
systemOnly: FALSE
searchFlags: 0
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.283 Attribute gPOptions

Options that affect all Group Policy associated with the object hosting this property.

```
cn: GP-Options
ldapDisplayName: gPOptions
attributeId: 1.2.840.113556.1.4.892
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: f30e3bbf-9ff0-11d1-b603-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.284 Attribute groupAttributes

```
cn: Group-Attributes
ldapDisplayName: groupAttributes
attributeId: 1.2.840.113556.1.4.152
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf96797e-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fATTINDEX
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.285 Attribute groupMembershipSAM

Windows NT security. Down-level Windows NT support.

```
cn: Group-Membership-SAM
ldapDisplayName: groupMembershipSAM
```


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```
attributeId: 1.2.840.113556.1.4.166
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: bf967980-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.286 Attribute groupPriority

```
cn: Group-Priority
ldapDisplayName: groupPriority
attributeId: 1.2.840.113556.1.4.345
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: eea65905-8ac6-11d0-afda-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.287 Attribute groupsToIgnore

```
cn: Groups-to-Ignore
ldapDisplayName: groupsToIgnore
attributeId: 1.2.840.113556.1.4.344
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: eea65904-8ac6-11d0-afda-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.288 Attribute groupType

This attribute contains a set of flags that define the type and scope of a group object. For more information about the possible values for this attribute, see the Remarks section of [MSDN-GroupType].

```
cn: Group-Type
ldapDisplayName: groupType
attributeId: 1.2.840.113556.1.4.750
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
```


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```
schemaIdGuid: 9a9a021e-4a5b-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: fPRESERVEONDELETE | fATTINDEX
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
 FLAG ATTR REQ PARTIAL SET MEMBER
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.289 Attribute hasMasterNCs

This attribute contains the distinguished names of naming contexts. Forward link for the Mastered-By attribute.

```
cn: Has-Master-NCs
ldapDisplayName: hasMasterNCs
attributeId: 1.2.840.113556.1.2.14
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: bf967982-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: 0
linkID: 76
mapiID: 32950
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.290 Attribute hasPartialReplicaNCs

Sibling to Has-Master-NCs. The Has-Partial-Replica-NCs attribute reflects the distinguished name for all other-domain NCs that have been replicated into a global catalog (GC).

```
cn: Has-Partial-Replica-NCs
ldapDisplayName: hasPartialReplicaNCs
attributeId: 1.2.840.113556.1.2.15
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: bf967981-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: 0
linkID: 74
mapiID: 32949
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.291 Attribute helpData16

This attribute was used for the Win16 Help file format for Exchange Server 4.0. It is not used for any other versions of Exchange Server.

```
cn: Help-Data16
ldapDisplayName: helpData16
attributeId: 1.2.840.113556.1.2.402
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 5fd424a7-1262-11d0-a060-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 32768
mapiID: 32826
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.292 Attribute helpData32

This attribute was used for the Win32 Help file format for Exchange Server 4.0. It is not used for any other versions of Exchange Server.

```
cn: Help-Data32
ldapDisplayName: helpData32
attributeId: 1.2.840.113556.1.2.9
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 5fd424a8-1262-11d0-a060-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 32768
mapiID: 32784
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

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2.293 Attribute helpFileName

This attribute was used for Exchange Server 4.0. It contained the name that is used for the file when the provider downloaded Help data to a client computer. It is not used for any other versions of Exchange Server.

```
cn: Help-File-Name
ldapDisplayName: helpFileName
attributeId: 1.2.840.113556.1.2.327
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 5fd424a9-1262-11d0-a060-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 13
mapiID: 32827
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.294 Attribute hideFromAB

This is a defunct attribute and is not to be used.

```
cn: Hide-From-AB
ldapDisplayName: hideFromAB
attributeId: 1.2.840.113556.1.4.1780
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: ec05b750-a977-4efe-8e8d-ba6c1a6e33a8
systemOnly: FALSE
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.295 Attribute homeDirectory

This attribute specifies the home directory for the account. This value can be a null string.

```
cn: Home-Directory
ldapDisplayName: homeDirectory
attributeId: 1.2.840.113556.1.4.44
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf967985-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fCOPY
attributeSecurityGuid: 5f202010-79a5-11d0-9020-00c04fc2d4cf
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```


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```
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.296 Attribute homeDrive

This attribute specifies the drive letter to which to map the UNC path specified by homeDirectory. The drive letter is specified in the form "<DriveLetter>:" where <DriveLetter> is the letter of the drive to map. The <DriveLetter> is a single, uppercase letter and the colon (:) is required.

```
cn: Home-Drive
ldapDisplayName: homeDrive
attributeId: 1.2.840.113556.1.4.45
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf967986-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fCOPY
attributeSecurityGuid: 5f202010-79a5-11d0-9020-00c04fc2d4cf
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.297 Attribute homePhone

The user's main home telephone number.

```
cn: Phone-Home-Primary
ldapDisplayName: homePhone
attributeId: 0.9.2342.19200300.100.1.20
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: f0f8ffa1-1191-11d0-a060-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 64
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
mapiID: 14857
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

In Windows 2000 Server, the following attributes are defined differently.

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```
systemFlags: 0
```

2.298 Attribute homePostalAddress

This attribute specifies a user's home address.

```
cn: Address-Home
ldapDisplayName: homePostalAddress
attributeId: 1.2.840.113556.1.2.617
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 16775781-47f3-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 4096
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
mapiID: 14941
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

On Windows 2000 Server, the following attribute is defined differently.

```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

2.299 Attribute host

This attribute type specifies a host computer.

```
cn: host
ldapDisplayName: host
attributeId: 0.9.2342.19200300.100.1.9
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 6043df71-fa48-46cf-ab7c-cbd54644b22d
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 256
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.300 Attribute houseIdentifier

The houseIdentifier attribute specifies a linguistic construct used to identify a particular building; for example, a house number or house name relative to a street, avenue, town, or city.

```
cn: houseIdentifier
ldapDisplayName: houseIdentifier
attributeId: 2.5.4.51
```


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```
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: a45398b7-c44a-4eb6-82d3-13c10946dbfe
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 32768
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.301 Attribute iconPath

This attribute specifies the source for loading an icon.

```
cn: Icon-Path
ldapDisplayName: iconPath
attributeId: 1.2.840.113556.1.4.219
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: f0f8ff83-1191-11d0-a060-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 2048
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.302 Attribute implementedCategories

This attribute specifies a list of component category IDs that this object implements.

```
cn: Implemented-Categories
ldapDisplayName: implementedCategories
attributeId: 1.2.840.113556.1.4.320
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: 7d6c0e92-7e20-11d0-afd6-00c04fd930c9
systemOnly: FALSE
searchFlags: fATTINDEX
rangeLower: 16
rangeUpper: 16
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.303 Attribute indexedScopes

This attribute specifies the list of indexed directory scopes (for example, C:\ or D:\).

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```
cn: IndexedScopes
ldapDisplayName: indexedScopes
attributeId: 1.2.840.113556.1.4.681
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 7bfdcb87-4807-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.304 Attribute info

This attribute specifies the user's comments. This string can be a null string.

```
cn: Comment
ldapDisplayName: info
attributeId: 1.2.840.113556.1.2.81
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf96793e-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 1024
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
mapiID: 12292
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.305 Attribute initialAuthIncoming

This attribute is not necessary for Active Directory functioning, and this protocol does not define a format beyond that required by the schema.

```
cn: Initial-Auth-Incoming
ldapDisplayName: initialAuthIncoming
attributeId: 1.2.840.113556.1.4.539
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 52458023-ca6a-11d0-afff-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.306 Attribute initialAuthOutgoing

This attribute is used to contain information about an initial outgoing authentication sent by the authentication server for this domain to the client that requested authentication. The server that uses this attribute receives the authorization from the authentication server and sends it to the client.

```
cn: Initial-Auth-Outgoing
ldapDisplayName: initialAuthOutgoing
attributeId: 1.2.840.113556.1.4.540
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 52458024-ca6a-11d0-afff-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.307 Attribute initials

This attribute contains the initials for parts of the user's full name. This can be used as the middle initial in the Windows address book.

```
cn: Initials
ldapDisplayName: initials
attributeId: 2.5.4.43
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: f0f8ff90-1191-11d0-a060-00aa006c33ed
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 6
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
mapiID: 14858
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.308 Attribute installUiLevel

This attribute specifies information for the type (level) of installation that is used for the user interface. Possible installation levels are as follows: 2 INSTALLUILEVEL_NONE (silent installation), 3 INSTALLUILEVEL_BASIC (simple installation with error handling), 4 INSTALLUILEVEL_REDUCED (authored UI, wizard dialogs suppressed), and 5 INSTALLUILEVEL_FULL (authored UI with wizards, progress, and errors).

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```
cn: Install-Ui-Level
ldapDisplayName: installUiLevel
attributeId: 1.2.840.113556.1.4.847
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: 96a7dd64-9118-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.309 Attribute instanceType

A bit field that dictates how the object is instantiated on a particular server. The value of this attribute can differ on different replicas even if the replicas are in sync. This attribute can be zero or a combination of one or more of the following bit flags.

Bit flag	Meaning
0x00000001	The head of naming context.
0x00000002	This replica is not instantiated.
0x00000004	The object is writable on this directory.
0x00000008	The naming context above this one on this directory is held.
0x00000010	The naming context is being constructed for the first time via replication.
0x00000020	The naming context is being removed from the local directory system agent (DSA).

```
cn: Instance-Type
ldapDisplayName: instanceType
attributeId: 1.2.840.113556.1.2.1
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf96798c-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: fPRESERVEONDELETE
mapiID: 32957
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
 FLAG_ATTR_REQ_PARTIAL_SET_MEMBER
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.310 Attribute internationalISDNNumber

This attribute specifies an international ISDN number associated with an object.

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```
cn: International-ISDN-Number
ldapDisplayName: internationalISDNNumber
attributeId: 2.5.4.25
attributeSyntax: 2.5.5.6
omSyntax: 18
isSingleValued: FALSE
schemaIdGuid: bf96798d-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeLower: 1
rangeUpper: 16
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
mapiID: 32958
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.311 Attribute interSiteTopologyFailover

This attribute indicates how much time can transpire since the last keep-alive message for the intersite topology generator to be considered dead.

```
cn: Inter-Site-Topology-Failover
ldapDisplayName: interSiteTopologyFailover
attributeId: 1.2.840.113556.1.4.1248
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: b7c69e60-2cc7-11d2-854e-00a0c983f608
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

Note This attribute is used for the server-to-server replication implementation only; the meaning is not significant to Windows clients.

2.312 Attribute interSiteTopologyGenerator

This attribute specifies support failover for the machine designated as the one that runs Knowledge Consistency Checker (KCC) intersite topology generation in a given site.

```
cn: Inter-Site-Topology-Generator
ldapDisplayName: interSiteTopologyGenerator
attributeId: 1.2.840.113556.1.4.1246
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: b7c69e5e-2cc7-11d2-854e-00a0c983f608
systemOnly: FALSE
searchFlags: 0
```


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```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

Note This attribute is used for the server-to-server replication implementation only; the meaning is not significant to Windows clients.

2.313 Attribute interSiteTopologyRenew

This attribute indicates how often the intersite topology generator updates the keep-alive message that is sent to domain controllers that are contained in the same site.

```
cn: Inter-Site-Topology-Renew
ldapDisplayName: interSiteTopologyRenew
attributeId: 1.2.840.113556.1.4.1247
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: b7c69e5f-2cc7-11d2-854e-00a0c983f608
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

Note This attribute is used for the server-to-server replication implementation only; the meaning is not significant to Windows clients.

2.314 Attribute invocationId

This attribute is used to uniquely identify the specific version of the directory database associated with a domain controller.

```
cn: Invocation-Id
ldapDisplayName: invocationId
attributeId: 1.2.840.113556.1.2.115
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: bf96798e-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: fATTINDEX
mapiID: 32959
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

In Windows 2000 Server, the following attributes are defined differently.

```
searchFlags: 0
```

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.315 Attribute ipHostNumber

This attribute specifies the IP address as a dotted decimal, omitting leading zeros.

```
cn: IpHostNumber
ldapDisplayName: ipHostNumber
attributeId: 1.3.6.1.1.1.1.19
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: FALSE
schemaIdGuid: de8bb721-85dc-4fde-b687-9657688e667e
systemOnly: FALSE
searchFlags: 0
rangeUpper: 128
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.316 Attribute ipNetmaskNumber

This attribute specifies the IP netmask as a dotted decimal, omitting leading zeros.

```
cn: IpNetmaskNumber
ldapDisplayName: ipNetmaskNumber
attributeId: 1.3.6.1.1.1.1.21
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: TRUE
schemaIdGuid: 6ff64fcd-462e-4f62-b44a-9a5347659eb9
systemOnly: FALSE
searchFlags: 0
rangeUpper: 128
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.317 Attribute ipNetworkNumber

This attribute specifies the IP network as a dotted decimal, omitting leading zeros.

```
cn: IpNetworkNumber
ldapDisplayName: ipNetworkNumber
attributeId: 1.3.6.1.1.1.1.20
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: TRUE
schemaIdGuid: 4e3854f4-3087-42a4-a813-bb0c528958d3
```


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```
systemOnly: FALSE
searchFlags: 0
rangeUpper: 128
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.318 Attribute ipPhone

This attribute specifies the TCP/IP address for the telephone. It is used by telephony.

```
cn: Phone-Ip-Primary
ldapDisplayName: ipPhone
attributeId: 1.2.840.113556.1.4.721
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 4d146e4a-48d4-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
rangeUpper: 64
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

In Windows 2000 Server, rangeUpper is not defined.

2.319 Attribute ipProtocolNumber

This attribute is part of the protocols map and stores the unique number that identifies the protocol.

```
cn: IpProtocolNumber
ldapDisplayName: ipProtocolNumber
attributeId: 1.3.6.1.1.1.1.17
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: ebf5c6eb-0e2d-4415-9670-1081993b4211
systemOnly: FALSE
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.320 Attribute ipsecData

The Ipsec-Data attribute is for internal use only.

```
cn: Ipsec-Data
ldapDisplayName: ipsecData
attributeId: 1.2.840.113556.1.4.623
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
```


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```
schemaIdGuid: b40ff81f-427a-11d1-a9c2-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.321 Attribute ipsecDataType

The Ipsec-Data-Type attribute is for internal use only.

```
cn: Ipsec-Data-Type
ldapDisplayName: ipsecDataType
attributeId: 1.2.840.113556.1.4.622
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: b40ff81e-427a-11d1-a9c2-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.322 Attribute ipsecFilterReference

The Ipsec-Filter-Reference attribute.

```
cn: Ipsec-Filter-Reference
ldapDisplayName: ipsecFilterReference
attributeId: 1.2.840.113556.1.4.629
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: b40ff823-427a-11d1-a9c2-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.323 Attribute ipsecID

The Ipsec-ID attribute.

```
cn: Ipsec-ID
ldapDisplayName: ipsecID
attributeId: 1.2.840.113556.1.4.621
attributeSyntax: 2.5.5.12
omSyntax: 64
```


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```
isSingleValued: TRUE
schemaIdGuid: b40ff81d-427a-11d1-a9c2-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.324 Attribute ipsecISAKMPReference

The Ipsec-ISAKMP-Reference attribute (see [MS-GPIPSEC] section 2.2.1.1.1).

```
cn: Ipsec-ISAKMP-Reference
ldapDisplayName: ipsecISAKMPReference
attributeId: 1.2.840.113556.1.4.626
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: b40ff820-427a-11d1-a9c2-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.325 Attribute ipsecName

The Ipsec-Name attribute.

```
cn: Ipsec-Name
ldapDisplayName: ipsecName
attributeId: 1.2.840.113556.1.4.620
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: b40ff81c-427a-11d1-a9c2-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.326 Attribute iPSECNegotiationPolicyAction

The IPSEC-Negotiation-Policy-Action attribute.

```
cn: IPSEC-Negotiation-Policy-Action
ldapDisplayName: iPSECNegotiationPolicyAction
attributeId: 1.2.840.113556.1.4.888
attributeSyntax: 2.5.5.12
```


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```
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 07383075-91df-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.327 Attribute ipsecNegotiationPolicyReference

The Ipsec-Negotiation-Policy-Reference attribute.

```
cn: Ipsec-Negotiation-Policy-Reference
ldapDisplayName: ipsecNegotiationPolicyReference
attributeId: 1.2.840.113556.1.4.628
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: b40ff822-427a-11d1-a9c2-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.328 Attribute iPSECNegotiationPolicyType

The IPSEC-Negotiation-Policy-Type attribute.

```
cn: IPSEC-Negotiation-Policy-Type
ldapDisplayName: iPSECNegotiationPolicyType
attributeId: 1.2.840.113556.1.4.887
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 07383074-91df-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.329 Attribute ipsecNFAReference

The Ipsec-NFA-Reference attribute (see [MS-GPIPSEC] section 2.2.1.1.1).

```
cn: Ipsec-NFA-Reference
ldapDisplayName: ipsecNFAReference
attributeId: 1.2.840.113556.1.4.627
```


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```
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: b40ff821-427a-11d1-a9c2-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.330 Attribute ipsecOwnersReference

The Ipsec-Owners-Reference attribute.

```
cn: Ipsec-Owners-Reference
ldapDisplayName: ipsecOwnersReference
attributeId: 1.2.840.113556.1.4.624
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: b40ff824-427a-11d1-a9c2-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.331 Attribute ipsecPolicyReference

The Ipsec-Policy-Reference attribute.

```
cn: Ipsec-Policy-Reference
ldapDisplayName: ipsecPolicyReference
attributeId: 1.2.840.113556.1.4.517
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: b7b13118-b82e-11d0-afee-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.332 Attribute ipServicePort

This is a part of the services map and contains the port at which the UNIX service is available.

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```
cn: IpServicePort
ldapDisplayName: ipServicePort
attributeId: 1.3.6.1.1.1.1.15
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: ff2daebf-f463-495a-8405-3e483641eaa2
systemOnly: FALSE
searchFlags: 0
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.333 Attribute ipServiceProtocol

This is a part of the services map and stores the protocol number for a UNIX service.

```
cn: IpServiceProtocol
ldapDisplayName: ipServiceProtocol
attributeId: 1.3.6.1.1.1.1.16
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: FALSE
schemaIdGuid: cd96ec0b-1ed6-43b4-b26b-f170b645883f
systemOnly: FALSE
searchFlags: 0
rangeUpper: 1024
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.334 Attribute isCriticalSystemObject

If TRUE, the object hosting this attribute is replicated during installation of a new replica.

```
cn: Is-Critical-System-Object
ldapDisplayName: isCriticalSystemObject
attributeId: 1.2.840.113556.1.4.868
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 00fbf30d-91fe-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.335 Attribute isDefunct

If TRUE, the class or attribute is no longer usable. Old versions of this object can exist, but new ones cannot be created.

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```
cn: Is-Defunct
ldapDisplayName: isDefunct
attributeId: 1.2.840.113556.1.4.661
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 28630ebe-41d5-11d1-a9c1-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.336 Attribute isDeleted

If TRUE, this object has been marked for deletion and will be removed from the Active Directory system [MS-ADOD].

```
cn: Is-Deleted
ldapDisplayName: isDeleted
attributeId: 1.2.840.113556.1.2.48
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: bf96798f-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: 0
mapiID: 32960
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG SCHEMA BASE OBJECT |
 FLAG_ATTR_REQ_PARTIAL_SET_MEMBER
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.337 Attribute isEphemeral

```
cn: Is-Ephemeral
ldapDisplayName: isEphemeral
attributeId: 1.2.840.113556.1.4.1212
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: f4c453f0-c5f1-11d1-bbcb-0080c76670c0
systemOnly: TRUE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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2.338 Attribute isMemberOfPartialAttributeSet

If TRUE, this attribute is replicated to the global catalog.

```
cn: Is-Member-Of-Partial-Attribute-Set
ldapDisplayName: isMemberOfPartialAttributeSet
attributeId: 1.2.840.113556.1.4.639
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 19405b9d-3cfa-11d1-a9c0-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.339 Attribute isPrivilegeHolder

This attribute specifies a back link to privileges held by a given principal.

```
cn: Is-Privilege-Holder
ldapDisplayName: isPrivilegeHolder
attributeId: 1.2.840.113556.1.4.638
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: FALSE
schemaIdGuid: 19405b9c-3cfa-11d1-a9c0-0000f80367c1
systemOnly: TRUE
searchFlags: 0
linkID: 71
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.340 Attribute isRecycled

If TRUE, this object has been marked for permanent deletion. Additionally, if the Recycle Bin optional feature is enabled, the value TRUE marks an object that cannot be undeleted. It will be removed from the Active Directory system [MS-ADOD].

```
cn: Is-Recycled
ldapDisplayName: isRecycled
attributeId: 1.2.840.113556.1.4.2058
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: 8fb59256-55f1-444b-aacb-f5b482fe3459
systemOnly: TRUE
searchFlags: fPRESERVEONDELETE
systemFlags: FLAG_SCHEMA_BASE_OBJECT |
 FLAG_ATTR_REQ_PARTIAL_SET_MEMBER
```


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```
isMemberOfPartialAttributeSet: TRUE
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.341 Attribute isSingleValued

If TRUE, this attribute can only store one value.

```
cn: Is-Single-Valued
ldapDisplayName: isSingleValued
attributeId: 1.2.840.113556.1.2.33
attributeSyntax: 2.5.5.8
omSyntax: 1
isSingleValued: TRUE
schemaIdGuid: bf967992-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: 0
mapiID: 32961
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.342 Attribute jpegPhoto

Used to store one or more images of a person by using the JPEG File Interchange Format, as specified in [JFIF].

```
cn: jpegPhoto
ldapDisplayName: jpegPhoto
attributeId: 0.9.2342.19200300.100.1.60
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: bac80572-09c4-4fa9-9ae6-7628d7adbe0e
systemOnly: FALSE
searchFlags: 0
showInAdvancedViewOnly: FALSE
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.343 Attribute keywords

This attribute specifies a list of keywords that can be used to locate a given connection point.

```
cn: Keywords
ldapDisplayName: keywords
attributeId: 1.2.840.113556.1.4.48
attributeSyntax: 2.5.5.12
```


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```
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: bf967993-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fATTINDEX
rangeLower: 1
rangeUpper: 256
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.344 Attribute knowledgeInformation

This attribute specifies a human-readable accumulated description of knowledge that is mastered by a specific DSA.

```
cn: Knowledge-Information
ldapDisplayName: knowledgeInformation
attributeId: 2.5.4.2
attributeSyntax: 2.5.5.4
omSyntax: 20
isSingleValued: FALSE
schemaIdGuid: 1677581f-47f3-11d1-a9c3-0000f80367c1
systemOnly: FALSE
searchFlags: 0
mapiID: 32963
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.345 Attribute l

This attribute represents the name of a locality, such as a town or city.

```
cn: Locality-Name
ldapDisplayName: l
attributeId: 2.5.4.7
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf9679a2-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fCOPY | fATTINDEX
rangeLower: 1
rangeUpper: 128
attributeSecurityGuid: 77b5b886-944a-11d1-aebd-0000f80367c1
mapiID: 14887
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG SCHEMA BASE OBJECT |
 FLAG_ATTR_REQ_PARTIAL_SET_MEMBER
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.346 Attribute labeledURI

This attribute specifies a Uniform Resource Identifier (URI) followed by a label. The label is used to describe the resource to which the URI points, and it is intended as a friendly name.

```
cn: labeledURI
ldapDisplayName: labeledURI
attributeId: 1.3.6.1.4.1.250.1.57
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: c569bb46-c680-44bc-a273-e6c227d71b45
systemOnly: FALSE
searchFlags: 0
showInAdvancedViewOnly: FALSE
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.347 Attribute lastBackupRestorationTime

This attribute specifies when the last system restore occurred.

```
cn: Last-Backup-Restoration-Time
ldapDisplayName: lastBackupRestorationTime
attributeId: 1.2.840.113556.1.4.519
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 1fbb0be8-ba63-11d0-afef-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.348 Attribute lastContentIndexed

This attribute specifies the time this volume was last content-indexed.

```
cn: Last-Content-Indexed
ldapDisplayName: lastContentIndexed
attributeId: 1.2.840.113556.1.4.50
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: bf967995-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
```


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```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.349 Attribute lastKnownParent

This attribute specifies the distinguished name of the last known parent of an orphaned or deleted object.

```
cn: Last-Known-Parent
ldapDisplayName: lastKnownParent
attributeId: 1.2.840.113556.1.4.781
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 52ab8670-5709-11d1-a9c6-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.350 Attribute lastLogoff

This attribute specifies the last time the user logged off. This value is stored as a large integer that represents the number of 100 nanosecond intervals since January 1, 1601 (UTC). A value of zero means that the last logoff time is unknown.

```
cn: Last-Logoff
ldapDisplayName: lastLogoff
attributeId: 1.2.840.113556.1.4.51
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: bf967996-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: 5f202010-79a5-11d0-9020-00c04fc2d4cf
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

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2.351 Attribute lastLogon

This attribute specifies the last time the user logged on. This value is stored as a large integer that represents the number of 100 nanosecond intervals since January 1, 1601 (UTC). A value of zero means that the last logon time is unknown.

```
cn: Last-Logon
ldapDisplayName: lastLogon
attributeId: 1.2.840.113556.1.4.52
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: bf967997-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: 5f202010-79a5-11d0-9020-00c04fc2d4cf
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.352 Attribute lastLogonTimestamp

This is the time that the user last logged on to the domain. Whenever a user logs on, the value of this attribute is read from the DC. If msDS-LogonTimeSyncInterval is nonzero, and the value is older than (current_time - msDS-LogonTimeSyncInterval), the value is updated with the current time. The initial update, after the domain functional level is raised to DS_BEHAVIOR_WIN2003 or higher, is calculated as 14 days minus a random percentage of 5 days.

Note This attribute is present on objects only when the domain functional level is DS_BEHAVIOR_WIN2003 or higher.

```
cn: Last-Logon-Timestamp
ldapDisplayName: lastLogonTimestamp
attributeId: 1.2.840.113556.1.4.1696
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: c0e20a04-0e5a-4ff3-9482-5efeaecd7060
systemOnly: FALSE
searchFlags: fATTINDEX
attributeSecurityGuid: 5f202010-79a5-11d0-9020-00c04fc2d4cf
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.353 Attribute lastSetTime

This attribute specifies the last time the secret was changed.

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```
cn: Last-Set-Time
ldapDisplayName: lastSetTime
attributeId: 1.2.840.113556.1.4.53
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: bf967998-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.354 Attribute lastUpdateSequence

This attribute specifies the update sequence number for the last item in the class store that was changed.

```
cn: Last-Update-Sequence
ldapDisplayName: lastUpdateSequence
attributeId: 1.2.840.113556.1.4.330
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 7d6c0e9c-7e20-11d0-afd6-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.355 Attribute lDAPAdminLimits

This attribute contains a set of attribute-value pairs defining LDAP server administrative limits.

```
cn: LDAP-Admin-Limits
ldapDisplayName: lDAPAdminLimits
attributeId: 1.2.840.113556.1.4.843
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: 7359a352-90f7-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

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2.356 Attribute lDAPDisplayName

This attribute specifies the name used by LDAP clients, such as the ADSI LDAP provider, to read and write the attribute by using the LDAP protocol.

```
cn: LDAP-Display-Name
ldapDisplayName: lDAPDisplayName
attributeId: 1.2.840.113556.1.2.460
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: bf96799a-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fPRESERVEONDELETE | fATTINDEX
rangeLower: 1
rangeUpper: 256
mapiID: 33137
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.357 Attribute lDAPIPDenyList

This attribute holds a list of binary IP addresses that are denied access to an LDAP server.

```
cn: LDAP-IPDeny-List
ldapDisplayName: lDAPIPDenyList
attributeId: 1.2.840.113556.1.4.844
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: 7359a353-90f7-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.358 Attribute lSACreationTime

This attribute is used to support replication to Windows NT 4.0 domains.

```
cn: LSA-Creation-Time
ldapDisplayName: lSACreationTime
attributeId: 1.2.840.113556.1.4.66
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: bf9679ad-0de6-11d0-a285-00aa003049e2
```


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```
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.359 Attribute lSAModifiedCount

This attribute is used to support replication to Windows NT 4.0 domains.

```
cn: LSA-Modified-Count
ldapDisplayName: lSAModifiedCount
attributeId: 1.2.840.113556.1.4.67
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: bf9679ae-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.360 Attribute legacyExchangeDN

This attribute specifies the distinguished name previously used by Exchange Server.

```
cn: Legacy-Exchange-DN
ldapDisplayName: legacyExchangeDN
attributeId: 1.2.840.113556.1.4.655
attributeSyntax: 2.5.5.4
omSyntax: 20
isSingleValued: TRUE
schemaIdGuid: 28630ebc-41d5-11d1-a9c1-0000f80367c1
systemOnly: FALSE
searchFlags: fPRESERVEONDELETE| fANR | fATTINDEX
attributeSecurityGuid: e48d0154-bcf8-11d1-8702-00c04fb96050
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.361 Attribute linkID

This attribute specifies an integer that indicates that the attribute is a linked attribute. An even integer is a forward link and an odd integer is a back link.

```
cn: Link-ID
```


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```
ldapDisplayName: linkID
attributeId: 1.2.840.113556.1.2.50
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf96799b-0de6-11d0-a285-00aa003049e2
systemOnly: TRUE
searchFlags: 0
mapiID: 32965
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.362 Attribute linkTrackSecret

This attribute specifies a link to a secret key that allows an encrypted file to be translated into plain text.

```
cn: Link-Track-Secret
ldapDisplayName: linkTrackSecret
attributeId: 1.2.840.113556.1.4.269
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: 2ae80fe2-47b4-11d0-a1a4-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
rangeLower: 0
rangeUpper: 16
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.363 Attribute lmPwdHistory

The password history of the user in LAN Manager (LM) one-way format (OWF). The LM OWF is used for compatibility with LAN Manager 2.x clients, Windows 95 operating system, and Microsoft Windows 98 operating system.

For more information about usage, refer to [MS-SAMR] sections 3.1.1.6 and 3.1.1.9.1.

```
cn: Lm-Pwd-History
ldapDisplayName: lmPwdHistory
attributeId: 1.2.840.113556.1.4.160
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: FALSE
schemaIdGuid: bf96799d-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.364 Attribute localeID

This attribute specifies a list of locale IDs supported by this application. A locale ID represents a geographic location; for example, a country/region, a city, or a county.

```
cn: Locale-ID
ldapDisplayName: localeID
attributeId: 1.2.840.113556.1.4.58
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: FALSE
schemaIdGuid: bf9679a1-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fCOPY
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.365 Attribute localizationDisplayId

This attribute is used to index the Extrts.mc file to get the localized displayName for the objects, for UI purposes.

```
cn: Localization-Display-Id
ldapDisplayName: localizationDisplayId
attributeId: 1.2.840.113556.1.4.1353
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: a746f0d1-78d0-11d2-9916-0000f87a57d4
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.366 Attribute localizedDescription

This attribute specifies the localization ID and display name for an object.

```
cn: Localized-Description
ldapDisplayName: localizedDescription
attributeId: 1.2.840.113556.1.4.817
attributeSyntax: 2.5.5.12
omSyntax: 64
isSingleValued: FALSE
schemaIdGuid: d9e18316-8939-11d1-aebc-0000f80367c1
systemOnly: FALSE
searchFlags: 0
```


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```
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.367 Attribute localPolicyFlags

This attribute specifies flags that determine where a machine gets its policy (Local-Policy-Reference).

```
cn: Local-Policy-Flags
ldapDisplayName: localPolicyFlags
attributeId: 1.2.840.113556.1.4.56
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf96799e-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG SCHEMA BASE OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.368 Attribute localPolicyReference

This attribute specifies the distinguished name of a local policy object that a policy object copies from.

```
cn: Local-Policy-Reference
ldapDisplayName: localPolicyReference
attributeId: 1.2.840.113556.1.4.457
attributeSyntax: 2.5.5.1
omSyntax: 127
omObjectClass: 1.3.12.2.1011.28.0.714
isSingleValued: TRUE
schemaIdGuid: 80a67e4d-9f22-11d0-afdd-00c04fd930c9
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: a29b8a01-c7e8-11d0-9bae-00c04fd92ef5
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.369 Attribute location

This attribute specifies the user's location, such as an office number.

```
cn: Location
ldapDisplayName: location
attributeId: 1.2.840.113556.1.4.222
attributeSyntax: 2.5.5.12
```


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```
omSyntax: 64
isSingleValued: TRUE
schemaIdGuid: 09dcb79f-165f-11d0-a064-00aa006c33ed
systemOnly: FALSE
searchFlags: fATTINDEX
rangeLower: 0
rangeUpper: 1024
isMemberOfPartialAttributeSet: TRUE
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.370 Attribute lockoutDuration

This attribute specifies the amount of time an account is locked due to the Lockout-Threshold being exceeded. This value is stored as a large integer. It represents the negative of the number of 100 nanosecond intervals that elapse, from the time the Lockout-Threshold is exceeded, before the account is unlocked.

```
cn: Lockout-Duration
ldapDisplayName: lockoutDuration
attributeId: 1.2.840.113556.1.4.60
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: bf9679a5-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: c7407360-20bf-11d0-a768-00aa006e0529
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

In Windows 2000 Server, rangeUpper is not defined.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.371 Attribute lockOutObservationWindow

This attribute specifies the waiting period after which the Lockout Threshold (section 2.372) is reset. The valid values are <None> and 00:00:00:01 through the Lockout Duration (section 2.370) value.

```
cn: Lock-Out-Observation-Window
ldapDisplayName: lockOutObservationWindow
attributeId: 1.2.840.113556.1.4.61
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: bf9679a4-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: c7407360-20bf-11d0-a768-00aa006e0529
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```


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Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.372 Attribute lockoutThreshold

This attribute specifies the number of invalid logon attempts that are permitted before the account is locked out.

```
cn: Lockout-Threshold
ldapDisplayName: lockoutThreshold
attributeId: 1.2.840.113556.1.4.73
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf9679a6-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
rangeUpper: 65535
attributeSecurityGuid: c7407360-20bf-11d0-a768-00aa006e0529
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.373 Attribute lockoutTime

This attribute specifies the date and time (UTC) that this account was locked out. This value is stored as a large integer that represents the number of 100 nanosecond intervals since January 1, 1601 (UTC). A value of zero means that the account is not currently locked out.

```
cn: Lockout-Time
ldapDisplayName: lockoutTime
attributeId: 1.2.840.113556.1.4.662
attributeSyntax: 2.5.5.16
omSyntax: 65
isSingleValued: TRUE
schemaIdGuid: 28630ebf-41d5-11d1-a9c1-0000f80367c1
systemOnly: FALSE
searchFlags: 0
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.374 Attribute loginShell

This attribute specifies the path to the logon shell. For more information, see [RFC2307] section 2.2.

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```
cn: LoginShell
ldapDisplayName: loginShell
attributeId: 1.3.6.1.1.1.1.4
attributeSyntax: 2.5.5.5
omSyntax: 22
isSingleValued: TRUE
schemaIdGuid: a553d12c-3231-4c5e-8adf-8d189697721e
systemOnly: FALSE
searchFlags: 0
rangeUpper: 1024
```

Version-Specific Behavior: Implemented on Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

2.375 Attribute logonCount

This attribute specifies the number of times that the account has successfully logged on. A value of 0 indicates that the value is unknown.

```
cn: Logon-Count
ldapDisplayName: logonCount
attributeId: 1.2.840.113556.1.4.169
attributeSyntax: 2.5.5.9
omSyntax: 2
isSingleValued: TRUE
schemaIdGuid: bf9679aa-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: 0
attributeSecurityGuid: 5f202010-79a5-11d0-9020-00c04fc2d4cf
systemFlags: FLAG_SCHEMA_BASE_OBJECT | FLAG_ATTR_NOT_REPLICATED
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.376 Attribute logonHours

This attribute specifies the hours that the user is allowed to log on to the domain.

```
cn: Logon-Hours
ldapDisplayName: logonHours
attributeId: 1.2.840.113556.1.4.64
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: bf9679ab-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fCOPY
attributeSecurityGuid: 5f202010-79a5-11d0-9020-00c04fc2d4cf
systemFlags: FLAG_SCHEMA_BASE_OBJECT
schemaFlagsEx: FLAG_ATTR_IS_CRITICAL
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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The schemaFlagsEx attribute was added to this attribute definition in Windows Server 2008.

2.377 Attribute logonWorkstation

For more information, see the userWorkstations attribute in [MS-ADA3].

```
cn: Logon-Workstation
ldapDisplayName: logonWorkstation
attributeId: 1.2.840.113556.1.4.65
attributeSyntax: 2.5.5.10
omSyntax: 4
isSingleValued: TRUE
schemaIdGuid: bf9679ac-0de6-11d0-a285-00aa003049e2
systemOnly: FALSE
searchFlags: fCOPY
attributeSecurityGuid: 5f202010-79a5-11d0-9020-00c04fc2d4cf
systemFlags: FLAG_SCHEMA_BASE_OBJECT
```

Version-Specific Behavior: Implemented on Windows 2000 Server, Windows Server 2003, Windows Server 2003 R2, Windows Server 2008, Windows Server 2008 R2, Windows Server 2012, Windows Server 2012 R2, and Windows Server 2016.

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3 Change Tracking

No table of changes is available. The document is either new or has had no changes since its last release.

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4 Index

A

Active Directory attributes beginning with A - L 13
Attributes beginning with A - L 13

C

Change tracking 153

I

Introduction 11

S

Schema attributes - Active Directory 13

T

Tracking changes 153

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